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# LOWER EGYPT AND THE PENINSULA OF SINAI 

## MONEY TABLE.

(Comp. p. xvi.)
Approximate'Equivalents.

| Arabic Name. |  |  |  | ish ney0 <br> 0 <br> 0 | Fre Mo <br> O <br> 品 <br> 品 | $\begin{aligned} & \text { nch } \\ & \text { aey } \\ & \text { d. } \\ & \text { H } \\ & \text { \# } \\ & \text { d } \end{aligned}$ |  | ican <br> ey <br> 3 <br> 0 <br> 0 <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gold Coins. |  |  |  |  |  |  |  |  |
| Gineh Masri (Egypt. pound 2 E ) | 100 | 1000 | 20 | 6 | 25 | 95 | 5 |  |
| Nusseh Gineh (half ${ }^{\text {EE) }}$ ) . . . | 50 | 500 | 10 | 3 | 13 | - | 2 | 50 |
| Silver Coins. |  |  |  |  |  |  |  |  |
| Riyal Masti. | 20 | 200 | 4 | 1 | 5 | 20 | 1 | $\bar{\square}$ |
| Nusseh Riydl | 10 | 100 | 2 | 3/5 | 2 | 60 | - | 50 |
| Rubía Riyal. . | 5 | 50 | 1 | 3/10 | 1 | 30 | - | 25 |
| Ghirshën (double piastre) | 2 | 20 | - | 5 | - | 52 | - | 10 |
| Ghirsh (piastre) . . |  | 10 | - | $21 / 2$ | - | 26 | - | 5 |
| Nickel Coins. |  |  |  |  |  |  |  |  |
| Nusseh Ghirsh. | $1 / 2$ | 5 |  | 1 |  |  |  | 2 |
| 2 Milliemes . . | 2/10 | 2 | - | $1 / 2$ | - | 5 | - | 1 |
| 1 Millième | $1 / 10$ | 1 | - | $1 / 4$ | - | $21 / 2$ | - | $1 / 2$ |

In Copper there are also pieces of $1 / 2$ and $1 / 4$ millieme (called also $2_{i}^{7}$ Para and 1 Para pieces, from the old system), but these are used by tourists only for bakshîsh.

The Pound Sterling (Ginêh inglisi) is worth 97 piastres 5 millièmes; the Fronch Twenty Franc Piece (Bint, derived from Napoleon Bonaparte) 77 pias. $11 / 2$ mill.; the Turkish Pound (Mejidìyeh) $873 / 4$ piastres. A 'purse' is equivalent to 500 piastres or about 103 s .

## Weights and Measures.

1 Dirhem $=3.93$ grammes $=60.65$ grains troy; 1 Rotl $=445.46 \mathrm{gram}-$ mes $=1.0131$ lhs. avoirdupois (about 1lb. $1 / \mathrm{soz}$.); 1 okika $=1.237$ kilogrammes $=2.7274$ lbs. (about 2 lbs. $111 / 2$ oz.) ; 1 Kantar $\stackrel{\text { e }}{=} 100$ rotll $=44.546$ kilogrammes $=101.31$ lbs. (about 101 lbs .5 oz .).

1 Rubia $=7.50$ litres $=131 / 3$ pints; 1 Wébeh $=30$ litres $=6$ gals. $22 / \mathrm{s} \mathrm{qts}. ; 1 \mathrm{Ardeb}=6$ wêbeh $=180$ litres $=46 \mathrm{gals} .13 / \mathrm{s} \mathrm{qt}$.

1 Pik $=0.67$ mètre $=26.37$ inches; 1 Pik, land measurement, $=29.527$ inches; 1 Kasabeh $=3.55$ mètres $=11$ ft. 7.763 inches.

1 Feddän $=4200$ square mètres $=$ about 5082 sq. yds. $=11 / 20$ acre.


## E G Y P T

# HANDBOOK FOR TRAVELLERS <br> EDITED BY 

## KARL BAEDEKER

PART FIRST :

# LOWER EGYPT AND THE PENINSULA 0F SINAI 

WITH 14 MAPS, 33 PLANS, 7 VIEWS, AND 76 VIGNETTES

THIRD EDITION, REVISED AND AUGMENTED

> LEIPSIC: KARL BAEDEKER, PUBLISHER. LONDON: DULAU AND CO., 37 SOHO SQUARE, W. 1895
'Go, little book, God send thee good passage, And specially let this be thy prayere
Unto them all that thee will read or hear, Where thou art wrong, after their help to call, Thee to correct in any part or all.'

## PREFACE.

The present volume, like the Editor's European handbooks and the companion-volume on Upper Egypt, is designed to supply the traveller with the most necessary information regarding the history and culture of the people he is about to visit, to protect him against extortion, and to render him as independent as the nature of the case admits of outside assistance. As Oriental life, customs, and scenery differ so widely from European, the Editor believes that the tourist will not take exception to the unusual voluminousaess of the preliminary information.

The materials from which the first edition of the Handbook for Lower Egypt was compiled were mainly furnished by Professor G. Ebers of Leipsic, while articles on special subjects, as well as many additions and emendations, were contributed by a number of other writers. Among the contributions specially prepared for the English version, the Editor wishes to particularize those of the distinguished Egyptologist, Dr. Samuel Birch. The third edition, which a ppears herewith, has been carefully revised and augmented with the kind assistance of several Egyptologists and other competent visitors to the places described. The notes on Arabic art and the ground-plans of the variouis mosques are due to the well-known architect, Franz Pasha of Cairo.

The Editor has also repeatedly visited Lower Egypt for the purpose of obtaining the most recent practical information, of the kind most likely to be useful to travellers. As, however, a tour in the East is attended with far greater difficulty than in Europe, and as sources of information are far less abundant, the Handbook must necessarily contain many imperfections, and the Editor will therefore gratefully avail himself of any communications which his readers may kindly contribute, as many of them have so generously done in the case of his European handbooks.

The Maps and Plans have been an object of the Editor's special care, as he knows by experience how little reliance can be placed on information obtained from the natives, even when the traveller is conversant with their language. They are based upon the most recent material available, in part as yet unpublished, and have been carefully corrected on the spot.

Heights above the sea-level and other measurements are given in English feet, from the latest and most trustworthy English and other sources.

The Prices and various items of expenditure mentioned in the Handbook are given in accordance with the Editor's personal experience, but they are liable to very great fuctuation, in accordance with the state of trade, the influx of foreigners, the traveller's own demeanour, and other circumstances. In some cases the traveller's expenditure may be within the rate indicated in the Handbook, but as many unexpected contingencies may arise on so long a journey, an ample pecuniary margin should always be allowed.

Hotels, etc., see p. xix.
To hotel-proprietors, tradesmen, and others the Editor begs to intimate that a character for fair dealing and courtesy towards travellers forms the sole passport to his commendation, and that advertisements of every kind are strictly excluded from his Handbooks. Hotel-keepers are also warned against persons representing themselves as agents for Baedeker's Handbooks.

## Abbreviations.

R. $=$ room ; B. = breakfast; D. = dinner; S. = supper; L. = light; A. $=$ attendance; Pens. $=$ pension, i.e. board and lodging. $-N .=$ north, northern, etc.; $S_{\text {. }}=$ south, southern, etc.; $E=$ east, etc. ; $W_{.}=$west, etc. -r. = right; l. = left; min. $=$ minute; hr. $=$ hour. $-\mathbf{M}=$ English mile; ft. = Engl. foot; fr. = franc; c. = centime; 㕱E. = Egyptiau pound; pias. $=$ piastre (comp. Table before the title-page).

The letter $d$ with a date, after the name of a person, indicates the year of his death. The number of feet given after the name of a place shows its height above the sea-level. The number of miles placed before the principal places on railway-routes and high-roads indicates their distance from the starting-point of the route.

## Asterisks

are used as marks of commendation.

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## INTRODUCTION.


#### Abstract

'I shall.now speak at greater length of Egypt, as it contains more wonder's than any other land, and is pre-eminent above all the countries in the world for works that one can hardly describe.'


Herodotus (B.C. 456).
At the close of last century Egypt was in a great measure rediscovered by the French savants attached to Bonaparte's Egyptian expedition. Since that period it has attracted the ever-increasing attention of the scientific; its historical and archæological marvels have been gradually unveiled to the world; it is the most ancient, and was yet at one time the most civilised country of antiquity; and it therefore cannot fail to awaken the profoundest interest in all students of the history and development of human culture.

Like other countries of the far East, Egypt possesses for the 'Frank' traveller the twofold attraction of scenery and history. To the first category belong the peculiar charms of its Oriental climate, the singularly clear atmosphere, the wonderful colouring and effects of light and shade, such as are unknown in more northern climates, the exuberant fertility of the cultivated districts contrasted with the solemn, awe-inspiring desert, and the manners, customs, and appearance of a most interesting, though not always pleasing, population. At the same time Egypt is pre-eminent among the countries of the East, and indeed among those of the whole world, as the cradle of history and of human culture. At every step we encounter venerable monuments which have survived the destructive influences of thousands of years and the vandalism of invaders and conquerors, and which are executed on so grand a scale, with so much artistic skill, and with such historical consistency, as at once to excite our highest admiration and command our most profound respect.

Owing to its distance from the homes of most travellers, and to the expense involved in exploring it, Egypt will never be overrun by tourists to the same extent as Switzerland or Italy; but it is now reached without difficulty by one of the numerous Mediterranean steamboat lines, and increased facilities are afforded to travellers by the recent construction of railways ( $\mathbf{p}$. xviii) within the country itself, while its unrivalled attractions abundantly reward the enterprising traveller and supply him with a subject of life-long interest.

## I. Preliminary Information.

## (1). Plan of Tour. Season. Expenses. Money. Equipment. - Travelling Companions.

Plan. The facilities for travel in Lower Egypt are now such that the intending visitor may make an outline of his tour at home with almost as great ease as for most of the countries of Europe. During the travelling season, moreover, the weather is always fine (comp. below), and never causes disappointment and derangement of plans as in most other countries. A glimpse at Lower Egypt, i.e. Alexandria, Cairo, and the Suez Canal, may be obtained in three weeks (exclusive of the journey out) as follows: 2-3 days may be devoted to Alexandria and the journey thence to Cairo, 10-12 days may be spent in Cairo and its neighbourhood in the manner suggested at p. 33, and 4-5 days may be occupied by the Suez Canal and excursions from it and by resting. These three weeks, however, might very pleasantly be spent at Cairo alone, the most interesting point in the tour. The journey to Mt. Sinai is now seldom made (see R. 15). For the Voyage up the Nile (3-6 weeks), see the second volume of this Handbook (Baedeker's Upper Egypt).

Sbason. From the beginning of November till the middle or end of April there are but few days of bad weather in the interior of Egypt; the prevalent temperature is that of a delicious spring or moderate summer, and the few drops of rain that occasionally fall will hardly be observed by the European traveller. The fertilising inundation of the Nile (p. lvii) has by this time subsided, and the whole face of the country smiles with fresh verdure. About the end of April, and sometimes as early as March, begins the period of the Khamsîn (p. lviii), a sultry, parching, and enervating wind from the desert, prevailing at longer or shorter intervals for about fifty days (whence the name), though in some seasons it does not make its appearance at all. Winter is therefore the proper season for a tour in Egypt, although the heat of summer, owing to the coolness of the nights, is less oppressive than in some parts of Southern Europe. (Compare also p. lxxiii.)

Expenses. The cost of a tour in Egypt, and in Oriental countries generally, is greater than that of a visit to most parts of Europe and the traveller should estimate his average daily expenditure at not less than 25-30s. (Steamboat-fares are of course extra; pp.1-5.) The traveller whose time is very limited, or who is accompanied by ladies, will also require the services of a guide, or 'dragoman', as they prefer to style themselves ( $5-10 \mathrm{~s}$. per day).

Money. A small sum of money for the early part of the journey may be taken in English or French gold, or in English banknotes (these usually at a discount of $1 / 4-1$ percent), but large sums should always be in the form of circular notes. These notes, which if kept separate from the 'letter of indication' cannot be cashed by a thief
or a dishonest finder, are issued by the principal London banks and by Messrs. Thos. Cook \& Son. Fresh supplies may be forwarded from England by post-offlce order, in sums not exceeding 500 fr . European bankers in Alexandria and Cairo, see pp. 6, 29.

Equipmbnt, It is less important now than it formerly was to purchase every requirement for the journey before leaving home, as the traveller can easily supplement his outfit at some of the modern shops of Alexandria or Cairo. For all ordinary purposes a couple of light tweed suits, a few flannel and soft cotton shirts, a supply of thin woollen socks, one pair of light and easy boots, one of shoes, and one of slippers, a moderately warm Ulster or long travelling cloak, a pith-helmet and a soft felt hat, together with the most necessary articles of the toilet, will amply suffice. It is advisable, for the prevention of colds and chills, to wear a woollen fabric next the skin; but light underclothing, with an Oxford shirt, will be found more suitable to the climate than a heavy flannel shirt. Those who intend making a prolonged stay at the principal towns may add a dress-suit and a few white shirts. If a muslin 'puggaree' be used for covering the hat, it should be made to fall over the back of the neck and ears as broadly as possible. This favourite European headdress, however, invariably attracts hosts of importunate candidates for 'bakshîsh'. Some travellers prefer the fez or tarbûsh, a red cloth skull-cap with black-silk tassel ( $4-15 \mathrm{fr}$.), over which, in native fashion, they tie a silk keffîyeh (manufactured in Egypt, 15-20 fr.), falling down behind in a triangle. This headdress protects the neck and cheeks admirably against the scorching Egyptian sun, especially whell a folded handkerchief or a white skull-cap (tâkî̀eh) is worn under the tarbûsh. In prolonged riding tours, a sun-shade is a fatiguing encumbrance. All articles should be new and strongly made, as it is often difficult and troublesome to get repairs properly executed in Egypt. White shirts, collars, and wristbands, which require frequent and skilful washing, should be as far as possible eschewed, as good laundresses are rare and expensive ( $2-4 \mathrm{fr}$. perdozen articles, irrespective of size). Few travellers walk in Egypt, except for very short distances, but sportsmen should add a stout pair of waterproof shooting-boots to their equipment.

Among the most important extras to be brought from Europe are a drinking cup of leather or metal, a flask, a strong pocket-knife, note-books, writing-materials, straps and twine, a thermometer, a pocket-compass of medium size, and a magnesium lamp for lighting caverns and dark chambers.

Companions. The traveller can hardly be recommended to start alone for a tour in a country whose customs and language are so entirely different from his own; but, if he has been unable to make up a suitable party at home, he will probably have an opportunity of doing so at Alexandria or Cairo, or possibly at Suez or Port Sa'îd. Travelling as a member of a party is, moreover, much less expensive than travelling alone, many of the items being the same for
a single traveller as for several together. - In spring and autumn Tourrst Partigs are organized for a visit to Egypt and the East, by the tourist-agents Messrs. Thos. Cook $\&$ Son (Ludgate Circus, London) and Messrs. Henry Gaze \& Sons (142 Strand, Loudon), programmes of which, with full information, may be obtained on application. Travellers who join such parties are enabled to inspect the principal points of interest with the minimum expenditure of time and trouble, but must naturally surrender, to a great extent, both their freedom of choice of companions and the disposal of their time. The expenses are not much below that of an independent tour.

## (2). Coinage. Passports. Custom House.

Coinage (comp. the table before the title-page). The confusion that formerly reigned in the Egyptian currency has been removed by the introduction of a new national coinage. The Egyptian Pound ('Livre Egyptienne'; $\mathscr{L}$ E.) is worth $20 \mathrm{~s} .6 \mathrm{~d} .$, and is divided into 100 Piastres, worth 10 Millièmes each. The Arabic name for the piastre is Ghirsh (pl. Ghurûsh), but the European name is everywhere current. Egyptian gold coins are seldom met with, their place being taken by the British sovereign (Ginêh inglîsi $=97$ pias. $\overline{0}$ mill.), the French Napoleon ( 20 fr .; Bint $=77$ pias. $11 / 2$ mill.), and the Turkish pound ( $M e$ jidîyeh $=87$ pias. $71 / 2$ mill. $=188$.), all of which are legally current. At Alexandria and Suez, and a few other points, reckoning in francs is still common. Where British influence is strong, as in places with large garrisons, the word Shilling is used for the Rub'a Riyall, which is equivalent to about 1s. $31 / 2 d$.

Counterfeit and obsolete coins are as yet rare in Egypt; but as they are more likely to be offered to foreigners than to natives, travellers should be on their guard against them when obtaining change. A liberal supply of small change is more essential in the East than any where else (comp. pp. xxii, xxiii, 29).

Passports are usually asked for at all the Egyptian ports, and if the traveller is unprovided with one he is liable to detention and great inconvenience. The passport is given up at the custom-house and reclaimed at the traveller's consulate or at Cairo. Bankers frequently require strangers to establish their identity by some such document; and the countenance and help of consuls (p.xx) must also depend upon the proof of nationality offered to them by the traveller. A British Foreign Office Passport (price 2s.; agent's fee 18. 6d.) may be obtained in London through W. J. Adams, 59 Fleet Street; E. Stanford, 26 Cockspur Street; Lee \& Carter, 440 West Strand; C. Smith \& Sons, 63 Charing Cross; etc.

Custom House. The custom-house examination at Alexandria is generally carried out with great thoroughness, though with perfect politeness, and no article of luggage is allowed to escape unopened. One of the objects chiefly, sought for is cigars, on which 75
per cent of the estimated value is charged (comp. p. xxxi). Considerable difficulty is also made about admitting firearms, and the importation of cartridges is now prohibited (comp. p. Ixxviii). The exportation of antiquities is forbidden, except with a special certificate of permission; and luggage is accordingly examined again as the traveller quits the country. The custom-house is now under European management, and it is advisable to refrain from an attempt to facilitate matters by bakshîsh (p. xxi). If luggage be forwarded a cross the frontier, the keys must be sent with it; but it is very desirable to superintend the custom-louse examination in person.

## (3). Conveyances.

Steamers. Egypt may be reached from England either by steamer direct or by overland route to one of the principal Mediterranean ports and thence by steamer. Particulars of the various routes are given in $R$. 1. Whether the traveller returns westwards on leaving Egypt, or intends to proceed to Syria or elsewhere, it is important that he should be familiar with the principal steamboat services. The vessels of the principal lines are nearly on a par with regard to comfort and speed, the British and German steamers being perhaps slightly superior, and the Italian steamers slightly inferior to the others. Iu autumn and winter vessels bound for Egypt, and in spring those returning westwards are apt to be crowded.

The time-tahles of the Peninsular \& Oriental Steam Navigation Co. may he obtained in London at 122 Leadenhall St., E.C., or at 25 Cockspur St., S.W.; and those of the Orient \& Pacific Co. ('Orient Line') at 5 Fenchurch Avenue, E.C., or at 16 Cockspur St., S.W. The North German Lloyd Co. has agencies at 65 Gracechurch St., E.C. and 32 Cockspur St., S.W., and the Navigazione Generale Italiana at 38 Fenchurch St., E.C. Those who purpose including Syria, Greece, and Constantinople in their Oriental tour should also, before leaving home, write to the 'Administration des Services des Messageries Maritimes, 16 Rue Cannebière, Marseilles' for a 'Livret des Lignes de la Mediterranee et de la Mer Noire', and to the 'Oesterreichische Lloyd, Trieste' for 'Information for Passengers by the Austrian Lloyd's Steam Navigation Company' (published in English). With the aid of these time-tables, the traveller will have little difficulty in making out his programme. See also 'Baedeker's Palestine and Syria' (sold at the bookshops of Alexandria and Cairo).

The Food, which is included in the first-class fare and usually in the second also, is always abundant and of good quality. Wine is not included in the fare except on board the French and Italian steamers. Many travellers prefer the cookery on board the French and Austrian steamers as being lighter and better suited to the climate than that of the English vessels. Passengers who are prevented by sickness from partaking of the regular repasts are supplied with lemonade and other refreshments gratis.

The Steward's Fee, which the passenger pays at the end of the voyage, is generally from $1 / 2$ fr. to 1 fr . per day; but more is expected if unusual trouble has been given.

The Baths provided for the use of passengers in the English and some of the other vessels may be used without extra charge, but the attendant expects a fee at the end of the voyage.

Ticests should never he taken at foreign ports through the medium of commissionaires or other persons who offer their services, but the traveller shonld, if possihle, purchase them at the office in person. The

Baedeker's Egypt I. 3rd Ed.
tickets bear the name of the passenger and the name and hour of departure of the vessel. Return or circular tickets (to Syria and Constantinople) and family tickets for three or more persons are generally issued at a reduced rate, but no reduction is made on the charge for food. A child of 2-10 years pays half-fare, but must share the berth of its attendant; for two children a whole berth is allowed.

Luggage of $150-220 \mathrm{lbs}$. is allowed to first-class, and of $85-135 \mathrm{lbs}$. to second-class passengers.

Embarkation. Passengers should be on board an hour before the advertised time of starting. At Marseilles, Trieste, and Brindisi the vessels start from the quays, so that passengers can walk on board; but at Venice and Naples passengers are conveyed to the steamers in small boats, for which the charge at all the Italian ports is 1 franc or lira for each person, including luggage. Good order is kept at these ports by the police. Payment of the boat-fare should not be made until the passenger and his luggage are safe on deck. Before the heavier luggage is lowered into the hold, the passenger should see it properly labelled.

All complaints should be addressed to the captain. On board the foreign steamers a kind of military precision is affected, and questions addressed to the officers or crew are apt to be answered very curtly.

Steamboats on the Suez Canal, see R. 13.
Railways. A network of railways constructed by the Egyptian government now connects all the important places in Upper Egypt. The engineer of the oldest of these lines, that from Alexandria to Cairo, was Mr. Stephenson, and the others were planned by FaidBey. The carriages resemble those of other countries, but the third class is insufferably dirty. The dust and heat render railway travelling in Egypt exceedingly unpleasant in hot weather. The management of the traffic, except in the case of express-trains, is not very satisfactory. The process of booking luggage is especially slow and troublesome. The traveller should therefore be at the station fully half-an-hour before the hour for starting, as the ticketclerks are entitled to close the office 10 minutes before the departure of the train. The personal tickets are printed in English and Arabic, the luggage tickets in Arabic only.

Donkeys (Arab. homar) still form the best means of conveyance both in the narrow streets of the towns and on the bridle-paths in the country, though in Alexandria and Cairo the use of Cabs is steadily on the increase. Egyptian donkeys are of a much finer, swifter, and more spirited race than the European, and at the same time patient and persevering. Those in the towns are generally well saddled and bridled in Oriental style. The attendants are either nen or boys, who contrive to keep up with their beasts at whatever pace they are going, and often address long sentences to them in their Arabic patois. As the gait of the donkeys is sometimes very uneasy when they break into a trot, care should be taken not to engage one with this defect for an excursion of any length. As the stirrups are often in bad condition they had better not be used at all. The donkey-boys (Arab. hammar) are fond of showing off the pace of their beasts, and often drive them unpleasantly fast. The rider who prefers a slower pace shouts ‘ala mahlak or 'ala mahlakum; if a quicker pace is wanted, yalla, yalla, or mâsĥ̂, or sûk el-homâr;
if a halt is to be made, osbur, or the English word 'stop'. The donkey-boys, especially at Cairo, are usually active and intelligent.

The Cambi is generally used for the Mt. Sinai tour only ; see R. 15.

## (4). Hotels.

The large hotels at Cairo are among the best in the world, combining western comfort with eastern luxury. They are managed mainly on the American system, the usual arrangement being to pay a fixed sum daily (p.5) for lodging and board, the latter consisting of breakfast, luncheon, and dinner. Wine, beer, and other liquors, which are extras, are dear, the cheapest wine costing 10-15 pias. per bottle, and British beer about the same. The waiter's fee should be calculated at about 5 per cent of the bill. - In other towns and even in Alexandria the hotels are much inferior. The more remote a place is from the ordinary track of European travellers, the poorer the inns are according to European ideas; and houses bearing most pretentious names are often nothing more than miserable inns.

## (5). Post and Telegraph Offices.

The Egyptian Postal Systrm (pp. 6,29) is admirably organised in all the principal towns, and now also in many smaller ones. The officials are civil and attentive. The addresses of letters destined for Egypt should always be written very distinctly (particularly the initial letters), and they had better be directed to the hotel at which the traveller intends to stay, or to the consulate. Registered Letters not addressed to a hotel are not delivered to the addressee unless he gets a resident to testify to his identity; those addressed to a hotel are delivered on presentation of the official notification of their arrival, bearing the stamp of the hotel. The Postage for letters within Egypt is 5 millièmes; to other countries in the Postal Union 10 millièmes; foreign Post-Cards, 5 millic̀mes. Parcels not exceeding 11 lbs. in weight may be sent to the countries of the union for 11 piastres, and must be accompanied by two declarations (one in French, one in the language of the country of destination). Parcels not exceeding 2 lbs. may be sent from England viâ P. \& 0 . steamer for 1 s .3 d ., and $5 d$. for every additional lb. up to 11 lbs .; or not exceeding 3 lbs . viâ Brindisi for $2 s .6 d$., over 3lbs. but not exceeding 7 lbs ., 3s. $2 d$. Post Office Orders are issued in Great Britain for payment in Egypt at the following rates of commission: for sums not exceeding $2 l ., 6 d$. ; ble, 1s.; 7l., 1s. 6d.; 10l., 2 s.

Telegraphs. There are two telegraph-systems in Egypt, the Egyptian und the English. Messages within Egypt may only be sent by the former, which has about 175 stations, of which about 30 are open day and night. The tariff is 4 pias. for 8 words or less, and $1 / 2$ pias. for each additional word. Telegrams may be sent in any European language. - Telegrams to Europe should be sent by the

English wires, viâ Malta, and certainly not by the Egyptian, viâ Constantinople, a provokingly dilatory route. The following is the tariff of the English telegraph : each word (not exceeding ten letters; if longer, it is reckoned as two words) to Great Britain 83 mill.; to North America 120-200 mill.; to Austria 73 mill.; to France 74 mill.; to Italy 65 mill.; to Switzerland 69 mill.; to Germany 76 mill.; to Russia 88 mill. - A telegram from Great Britain to Alexandria costs 1 s .7 d . per word; to other parts of Egypt 1s. 10d.-2s. $6 d$. per word.

## (6). Public Safety. Consulates. Courts of Justice.

Public Safbty. The authority of the Khedive is so well established throughout the whole of Egypt that travellers, even on the Sinai journey, are as safe as in Europe. Weapons for self-defence are an unnecessary encumbrance. - Guns for sport, see pp. 1xxviii, 31.

Travellers, however, who have scientific objects in view, and who require the co-operation of the natives or of the pasha or mudir of a district, or those who have reason to apprehend any difficulty or danger, may obtain through their consulates a viceregal recommendation (firmân or teskireh), which will often be found very useful.

Constlates. Consuls in the East enjoy the same privilege of exterritoriality as ambassadors in other countries. On public occasions they are attended by kavasses, or armed consular officers. A distinction is sometimes made between professional ('consules missi') and commercial consuls; and there are consuls general (who act also as political agents), consuls, vice-consuls, and consular agents, possessing various degrees of authority. In all cases of emergency the traveller should apply for advice to the nearest consul of his country; and courtesy as well as his own interest should prompt him to take the earliest possible opportunity of entering into friendly relations with these most useful officials.

Courts of Justick. In place of the exclusive consular jurisdiction to which foreigners were formerly liable, a system of Mixed Tribunals was established in 1876. The judges consist of natives and foreigners (the latter generally appointed by the Khedive from qualified officials nominated by the Great Powers), who give their verdicts in accordance with Egyptian law, founded on that of France and Italy. Cases in which the Khedive himself and the Egyptian government are concerned are also tried before this tribunal, which includes courts of first and second instance. The courts of the first instance are at Cairo, Alexandria, and Manṣ̂ra, and there is a delegation at Port $\mathrm{Sa}^{\wedge} \mathrm{i} \mathrm{d}$. The appeal-court is at Alexandria. - Cases between natives, and all criminal cases, are tried by the Native Courts, established in 1884. Courts of the first instance are situated at Cairo, Alexandria, Beni Ṣuêf, Siûṭ, and Keneh, and also (with a more limited jurisdiction) at TTanța and Manṣûra (Zaţâzîk). The appeal-court is at Cairo; about half the number of its judges are Europeans. The procedure is based upon the Code Napoléon.

## (7). Dragomans. Bakshish.

Travellers about to make a tour of any length may avoid all the petty annoyances incident to direct dealings with the natives by placing themselves under the care of a Dragoman (Arab. Turgemân). The name is also appropriated to themselves by the ordinary commissionaires in Cairo, Alexandria, Port Saîd, etc., whose services will be found sufficient for these towns (comp. pp. 6, 31). A dragoman proper is usually employed for the longer tours only, such as the voyage up the Nile, the journey to Mt. Sinai, the excursion to the Fayûm, and a visit to the less frequented towns in the Delta.

The word dragoman is derived from the Chaldæan targem, 'to explain', or from targam, 'explanation'. The Arabic targam also signifies 'to interpret'. The dragoman was therefore originally merely a gnide who explained or interpreted. Since the 7th cent. B.C., when Psammetikh I. threw open the conntry to foreign trade, against which it had previonsly been jealously closed, this class, which is mentioned by Herodotus as a distinct caste, has existed in Egypt. That author informs ns that Psammetikh cansed a number of Egyptian children to be educated by Greeks in order that they might learn the Greek language; and it was these children who afterwards became the founders of the dragoman caste. The great historian himself employed a dragoman, from whom he frequently derived erroneons information. A dragoman, who was employed by the governor Elius Gallus to accompany him up the Nile, is accused by Strabo of absnrdity, conceit, and ignorance. The ignorant Arabian, Nubian, or Maltese dragomans of the present day do not attempt to explain or translate the ancient inscriptions.

The dragomans, who speak English, French, and Italian, undertake for a flxed sum per day to defray the whole cost of locomotion, hotel accommodation, fees, and all other expenses, so that the traveller is enabled to obtain, as it were, a bird's eye view of the country without being concerned with the cares of daily life. On the other hand the traveller is frequently imposed upon by the dragoman himself. The charge made by the dragoman varies very greatly according to circumstances, such as the number and the requirements of the travellers, the length of the journey, and the amount of the demand for the services of such a guide. Dragomans of the better class usually consider it beneath their dignity to escort their employers through the streets of the towns, and are apt to consign them to the guidance of the local cicerones. They are inclined also to assume a patronising manner towards their employers, while they generally treat their own countrymen with an air of vast superiority. The sooner this impertinence is checked, the more satisfactory will be the traveller's subsequent relations with his guide.

On the successful termination of the journey travellers are too apt from motives of good natura to write a more favourable testimonial for their dragoman than he really deserves; but this is truly an act of injustice to his subsequent employers, and tends to confirm him in his faults. The testimonial therefore should not omit to mention any serious cause for dissatisfaction.

Bagshîsh. The word bakshîsh, which resounds so perpetually in the traveller's ears during his sojourn in the East, and haunts him long afterwards, simply means 'a gift'; and, as everything is to be
had in return for gifts, the word has many different applications. The average Oriental regards the European traveller as a Cresus, and sometimes too as a madrnan, - so unintelligible to him are the objects and pleasures of travelling. Travellers are often tempted to give for the sake of affording temporary pleasure at a trifling cost, forgetting that the seeds of insatiable cupidity are thereby sown, to the infinite annoyance of their successors and the demoralisation of the recipients themselves. Bakshîsh should never be given except for services rendered, and every attempt at extortion should be firmly resisted, as compliance only makes the applicants for bakshîsh doubly clamorous. Payment should never be made until the service stipulated for has been rendered, after which an absolutely deaf ear should be turned to the protestations and entreaties which almost invariably follow. Thanks, it need hardly be said, must never be expected from such recipients (comp. p. ccxiii). Even when an express bargain has been made, and more than the stipulated sum paid, they are almost sure to pester the traveller in the way indicated. When no bargain has been made, the fees and prices mentioned in the Handbook, all of which are ample, should be paii without remark; and if the attacks which ensue are not silenced by an air of calm indifference the traveller may use the word rûh or imshi (be off!) in a quiet but decided and imperative tone. At the same time it must be admitted that the increasing number of visioors to Egypt tends to raise prices during the chief travelling season, so that a larger bakshîsh than is mentioned in the Handbook is sometimes necessary. The Egyptians, it must be remembered, occupy a much lower grade in the scale of civilisation than most of the western nations, and cupidity is one of their chief failings; but if the traveller makes due allowance for their shortcomings, and treats the natives with consistent firmness, be will find that they are by no means destitute of fidelity, honesty, and kindliness.

Notwithstanding all the suggestions we have ventured to offer, the traveller will to some extent have to buy his experience. In most cases the overcharges to which he will be exposed will be comparatively trifling; but if extortion is attempted on a larger scale, he had better refer the matter to his consul.

Beggars are exceedingly numerous in Egypt, especially in the country-districts. In every village ragged childreu pursue the traveller with their ceaseless cry of 'bakshîsh, bakshîsh, yâ lchawâgeh' (oh, sirl a gift!; comp. p. 40). The best reply to such applications is ' $m \hat{a}$ fîsh, mâ fîsh' (I have nothing for you), which will generally have the effect of dispersing the assailants. Charity should be given only to the sick or the aged. A beggar may be silenced with the words 'Allâh yat tik' (may God give thee!).

The traveller should take care to be amply supplied with small Change at all times, and especially before taking an excursion into the country (comp. pp. xvi, 29).

## (8). Health.

Fine as the climate of Egypt generally is, the chilly mornings and evenings are often treacherous, and if cold is caught it is apt to result in a tedious intermittent or other fever. There are good chemists at Alexandria and Cairo, from whom small medicinechests adapted for the climate may be purchased. In serious cases of illness a European doctor, when procurable, should always be consulted, as the traveller's own experience acquired at home is of little avail in the climate of Egypt.

Fits of shivering are the usual prelude to an attack of fever. Quinine is the best remedy, of which 1-3 doses should be taken on the days when the patient is free from fever. Rest and copious perspiration will also afford relief.

Diarrhcea, which is apt to turn to dysentery, is a very common complaint in this climate, and is generally the result of eating unripe fruit or of catching cold. The patient should first take a slight aperient, and afterwards tincture of opium or concentrated tincture of camphor. A simple farinaceous diet (such as well-boiled rice), with tea or well matured, unfortified, and nnsweetened red wine, will be beneficial, while froit, meat, and fatty substances should be avoided. In cases both of diarrhœa and fever all remedies are sometimes unavailing except change of climate, especially if the patient is in a marshy or unhealthy locality.

Sprains, which often result from exploring ruins and caverns, are most effectually treated with cold compresses, while the injured limb should be tightly bandaged and allowed perfect rest.

The sting of a scorpion (seldom dangerous) or bite of a snake is usnally treated with ammonia.

Sunstroke is very common in Egypt, even in spring when the air is still cool. The head and neck should therefore always be carefully shielded in one of the ways above indicated. The usual remedies are rest and shade, cold compresses, and warm baths with cold douches applied to the head and neck.

Grey (better than blue) spectacles or veils may be used with advantage when the eyes suffer from the glare of bright weather. Zinc eyewash, or some other innocnous lotion, should be used in such cases.

The sticking-plaster, lint, as well as all effervescing powders, and other medicines carried by the traveller should be carefully kept from exposure to moisture.
(9). Arabian Cafés. Story-tellers. Musicians. Singers, etc.

Arablan Cafís (kahwa) abound everywhere, even in the smallest villages. In the country they usually consist of wooden booths, with a few seats made of plaited palm-twigs (gerîd), and even in the large towns, like Cairo, they are very small and uninviting. The kahwas are frequented by the lower classes exclusively. The front generally consists of woodwork with a few open arches. Outside the door runs a mastaba, or raised seat of stone or brick, two or three feet in height and of about the same width, covered with mats, and there are similar seats on two or three sides of the interior. Coffee is served by the kahwegi at $1 / \mathbf{4}^{-1}$ pias. per cup (fingân), and several nargîlehs and shîshehs or gôzehs (waterpipes) are kept in readiness for the use of customers. The tumbâk (p. xxxii) smoked in the latter is sometimes mixed with the intoxicating hashîsh (hemp, Cannabis Indica), the strong and unmis-
takable smell of which is often perceptible even in the street. The sale of hashîsh is now nominally prohibited in Egypt.
'The leaves and capsules of hemp, called in Egypt hasheesh, were employed in some countries of the East in very ancient times to induce an exhilarating intoxication. Herodotas (iv. 75) informs us that the Scythians had a custom of burning the seeds of this plant in religious ceremonies, and that they became intoxicated with the fumes. Galen also mentions the intoxicating properties of hemp. The practice of chewing the leaves of this plant to induce intoxication prevailed, or existed, in India in very early ages; thence it was introduced into Persia; and about six centuries ago (before the middle of the thirteenth century of our era) this pernicious and degrading custom was adopted in Egypt, but chiefly by persons of the lower orders. .. The preparation of hemp used for smoking produces boisterous mirth. Few inhalations of the smoke, but the last very copious, are usually taken from the gózeh. After the emission of the last draught from the mouth and nostrils, commonly a fit of coughing, and often a spittiug of blood, ensues, in consequence of the lungs having been filled with the smoke. Hasheesh is to be obtained not only at some of the coffee-shops: there are shops of a smaller aud more private description solely appropriated to the sale of this and other intoxicating preparations: they are called mahsheshehs. It is sometimes amusing to observe the ridiculous conduct; and to listen to the conversation, of the persons who frequent these shops. They are all of the lower orders. The term hashshásh, which signifies a smoker, or an eater, of hemp, is an appellation of obloquy: noisy and riotous people are often called hashshásheen, which is the plural of that appellation, and the origin of our word assassin; a name first applied to Arab warriors in Syria, in the time of the Crusades, who made use of intoxicating and soporific drugs to render their enemies insensible'.
'The use of opium and other drugs to induce intoxication is not so common in Egypt as in many other countries of the East: the number of Egyptians addicted to this vice is certainly not nearly so great in proportion to the whole population as is the relative number of persons in our own country who indulge in habitual drunkenness'....
'Boozeh or boozah, which is an intoxicating liquor made with barleybread, crumbled, mixed with water, strained, and left to ferment, is commonly drunk by the boatmen of the Nile, and by other persons of the lower orders'. - Lane (1833-35).

Numerous taverns now exist exclusively for the sale of bûzeh, kept chiefly by Nubians. It is usually dispensed immediately from a large boiler with a wooden ladle, which is passed from mouth to mouth, the customers being of both sexes. The liquor is intoxicating in a very slight degree.

Many of the kahwas are frequented, especially on the eves of festivals (p. c), by story-tellers and musicians. The performances range from those of a very simple character to gorgeous entertainments with dancing, music, and flreworks; and these 'fantasîyas', as they are called by the modern Arabs, afford unbounded delight.

Story Tellers (who in private domestic circles are generally women) still form a characteristic Oriental institution. Wherever they make their appearance, whether in the public streets or the coffee-house, in the densely peopled alleys of the large towns, or in the smallest country villages, or among the tents of the wandering Arabs, they are sure to attract an attentive; easily pleased, and exceedingly grateful crowd. The more sensational the tale, the better, and the oftener is the narrator applauded with protracted cries of 'Auh', or 'Allâh', or 'Allâhu akbar l'.

Most of the story-tellers belong to the so-called Sho ara (sing. Shấir), literally 'singers'. They are also known as 'Anâtireh (sing. 'Antari) or Abu-Zêdîyeh, according as their theme consists of tales and romances from the history of 'Antar, a Beduin hero, or from that of Abu Zêd. Others again are called Mohadditin, i.e. narrators of history, their province being the recital in prose of passages from the history of Sultan Ez-Zâhir Bêbars, who reigned over Egypt in 1260-79 (p. cxxiii). The entertainments of the 'alf lêleh u lêleh' (thousand and one nights) are, however, no longer heard, as popular superstition has branded this collection of tales as 'unlucky'. There are also professional improvisors and travelling singers, whose performances are very popular; but the themes of the whole fraternity are too often of an immoral character.

Musicians by profession, called Âlâtîyeh (sing. Âlâti), are indispensable on every festive occasion. The usual instruments are the relle or tambourine with little bells, the naklêreh, or semispherical tambourine, the zemr or hautbois, the tabl beledi or drum, the tabl shâmi or kettle-drum, and the darabulteh, a kind of funnel-shaped drum (generally made of earthenware, but sometimes of mother-of-pearl and tortoise-shell, with a fish-skin stretched over the broad end), which last is accompanied by the zummâra, a kind of double flute. A better class of instruments, used for chamber music, consists of the nâi, a kind of flute, the kemengeh or two-stringed violin, the body of which consists of a cocoa-nut shell, the rebâbeh, or one-stringed violin with a square wooden body, the kannun, a kind of zither with strings of sheep-gut, and lastly the ' $\hat{u} d$, the lute or mandoline, the oldest of all the instruments.

The Egyptians consider themselves a highly musical people, and the traveller will indeed often be strack by the frequency of their singing. The Egyptian sings when indulging in his kêf (p. xxviii), whether sitting on his heels or stretched out on his mat, when driving his donkey, when carrying stones and mortar up a scaffolding, when working in the fields, and when rowing. He sings whether alone or in company, regarding his vocal music as a means of lightening his labonr and of sweetening his repose. A peculiarity of the Egyptian songs, however, is that they have no tune, though they have a certain rhythm, which is always dependent on the text. They are sung through the nose on seven or eight different notes, on which the performer wanders up and down as he feels inclined. $f$ The character of this so-called music is exceedingly monotonous, and to a European ear displeasing. The songs (mawwal or shaghl) are all of a lyrical description, most of them are erotic and often grossly obscene, and many are at the same time pointless and meaningless. Some of them, however, extol the pleasures of friendship and rational enjoyment, or express derision of an enemy, or contempt for the rustic fellah. Thns a favourite song of the donkey-boys derides a young fellah called 'Alî, the favourite of his village, and is usually sung in mockery of some one of the name.

[^0]| Shuftum 'Ali yà no Lâbis 'amîs wilbd̆s |
| :---: |
|  |
| Yil'ab el-birgas |
| Wal 'antaret ethaddit |
| Nus il beled haggit |
| Kuiluh 'ala shân 'Ali |
| Ya'ni yarni |

Shuftum 'Ali fîkum<br>Wallahtaf tavàîkum<br>Wahruh beled min dol<br>Wârud telâtîn yôm<br>Kulluh 'ala shan 'Ali Yáni yani<br>Kulluh ‘ala shan ‘Ali.

1. Have you seeu 'Ali, ye people, in shirt aud drawers, standing on the bridge of ${ }^{\text {c Abbâs and showing off his equestrian tricks? But the bridge }}$ is now destroyed, and half the village has flowu away. Aud all this for 'Ali's sake, yes, for 'Ali's sake.
2. Have you seen 'Ali among you? If not, I will run off with your skull-caps (p. xv) and will go into one of the villages and remain there thirty days. All this for 'Ali's sake, yes, for 'Ali's sake.

The pleasures of hashish-smokiug are thus extolled: -
Gôzeh min el-hind wumı‘akkeb'alêha ghäb
Wumdandisheh bil wac wumgamm'a el ahbab
Akhatteh minhâ nefes el-‘akl minni ghâb
Ba'êt abaldam zei el gamal guwwa 'lghâb
Tub ‘aléya yà tawwâb
Min shurb el gôzeh wal ghâb.
$h a ̂ a \hat{a} h \hat{a} \dagger$
Min shurb el gózeh wal ghâb.
Oh cocoa-uut $\dagger \dagger$ of India, in which is fixed the stem inlaid with shells, that collects friends around it. I have taken a whiff from it - and my understaudiug fled. I drew so that the tube gurgled like a camel. Oh! forgive me, thou Blotter out of sins! that I smoke out of the cocoa-unt with its stem.

Thwarted love is auother favourite theme. One of these songs begins - Hôi, hơi, ya habîbî! Hôi, hôi, kun tabîbi! (come, come, oh beloved! come and be my physician !). These songs also frequently describe the charms of the beloved object with great minuteness.

Femate Singers ('Awâlim, sing. 'Almeh or 'Alimeh; i.e. 'learned women') of a good class are now very rare, and those who still exist perform only in the harems of wealthy natives, so that the traveller will seldom or never have an opportunity of hearing them. Others of a low class are frequently seen in the streets accompanied by one or two musicians, who are generally blind.

The Femate Dancers, or caste of the Ghawâzi (sing. Ghâziyeh), which is quite distinct from that of the 'Awâlim, were formerly one of the chief curiosities of Egypt, but for some years past they have been prohibited from performing in the streets. Really good dancers are said to be now rare, but on the Nile voyage the traveller will have an opportunity at Keneh, Luksor, and Esneh of seeing very curious and elaborate, though to his taste often ungraceful performances. Most of the dancers congregate at the fair of Tanta (p. 25), but the most skilful decline to exhibit unless paid with gold. The Hawal, or men in female attire, who frequently dance at festivities instead of the Ghawâzi, present a most repulsive appearance.

[^1]The Snake Charmbrs (Rifấiyeh, sing. Rifấi), who form another distinct caste, exhibit performances of a very marvellous character, as credible European residents in Cairo have testified; but the traveller will rarely come in contact with them. The ordinary exhibition of dancing snakes may, however, occasionally be seen in the Ezbekîyeh. The boys who exhibit small snakes at the hotels must of course not be confounded with the Rifà'îyeh.

The Jugglers ( $H \hat{a} w \hat{v}$ ) of Egypt are similar to those of other countries. The performances of the Buffoons (Kurâdati or Mohab$b a z i$, which are chiefly intended for the amrsement of the young, are disgracefully indelicate.

## (10). Baths.

The baths of Egypt, with their hot-air chambers, are those commonly known as Turkish, but they are neither so clean nor so well fitted up as some of those in the larger cities of Europe. A Turkish bath is particularly refreshing after a long journey, and is an admirable preventive of colds and rheumatism. The baths are always cleanest in the early morning. Fridays are to be avoided, as numerous Muslims bathe early on that day, which is their Sabbath. When a cloth is hung up at the entrance to the baths, it indicates that women only are admitted.

The harâra (see Plan), as well as the maghtas and hanafîyeh, have flat ceilings in which are openings covered with stained glass. The maghṭas and the hanafîyeh contain marble basins for washing, provided with taps for warm water; the maghtas contain besides a bath sunk in the pavement. Cold water is brought in ewers. The harâra, or general bath-chamber, is less heated than the separate rooms, and is filled with steam. All the chambers are paved with marble slabs and heated by flues under the pavement and behind the walls.

The visitor first enters a large vaulted chamber covered with a cupola (hôsh el-hammâm), having a fountain of cold water in the centre (faskîyeh), and the bathing towels hung around on strings, these last being swung into their places or taken down with bamboo rods according to requirement. Having taken off his shoes and given them to the attendant, the visitor is next conducted to one of the raised lîwâns (Pl. 4) that are still unoccupied, where he proceeds to undress. Valuables may, if desired, be entrusted to the bath owner. Wrapping a cloth round his loins, he leaves his lîwân, is provided with pattens or wooden shoes ( $\mathfrak{l} a b \neq \hat{a} b$ ), and is conducted to the hot room (harâra) in the interior of the establishment. Near one of the basins here a linen cloth is spread for the bather, and he is now left to perspire. As soon as the skin is thoroughly moist, he calls for the attendant (comp. Arabic vocabulary, p. ccri), who pulls and kneads the joints till they crack, a process to which Europeans are not generally subjected. This is
followed by the pleasanter operation of shampooing, which is performed by the $a b u$ kîs or $a b u$ sâbûn, who is requested to do his duty with the word 'leyyisni' (rub me), and who then rubs the bather with the kîs, a rough piece of felt. The attendant next thoroughly soaps the bather, and concludes the operations by pouring bowls of warm water over his head. If the water is too hot the bather may ask for cold ('hât môyeh bârideh'), or say 'enough' (bes). After this process douches of hot or cold water may be indulged in according to inclination, but the most refreshing plan is to change the temperature gradually from hot to cold, the direction to the attendant being


1. Entrance. 2. Hosh el-hammâm (a kind of antechamber, used also by the poorer classes as a dressing-room). 3. Faskîyeh (fountain). 4. Lîwân (better dressing-rooms, generally consisting of two divisions: the el-liwoan el-fallasí, with straw-mats, and the el-liwan el-‘al, with cushions, for the richer bathers). 5. Coffee-seller. 6. Bêt-el-awwel (warmed dressing-room for cold weather). 8. Latrines. 7. Entrance to the - 9. Hardara (or'sudatorium'). 10. Lîwan. 11. Maghtas (cabinets with basins). 12. Hanafiyeh (chambers with basins and taps for hot water). 13. Furnaces. 14. Boilers.
'môyeh bârideh!' When desirous of leaving the hot room, the bather says to the attendant 'hât futta' (bring a towel), whereupon he is provided with one for his loins, another for his shoulders, and a third for his head. The slippers or pattens are then put on, and the antechamber re-entered. When the $k a b k \hat{a} b s$ are removed, cold water is sprinkled over the feet, fresh towels are then provided, and the bather at last throws himself down on his divan, wonderfully refreshed, yet glad to enjoy perfect repose for a short time. This interval of tranquil enjoyment is the favourite Oriental 'kêf' (i.e. luxurious idleness). Every bath contains a coffee and pipe establishment. Coffee and hot eau sucrée are the favourite beverages. Before
dressing, the bather is generally provided with two or three more relays of fresh towels. The whole of these operations need not occupy much more than an hour, but Orientals often devote a whole morning to the bath. - Many of the baths are charitable foundations, where the natives pay little or nothing. Europeans are generally expected to pay 8 piastres or more (including coffee and nargîleh), and a fee of about 1 pias. is given to the 'soap man'.
'The women who can afford to do so visit the hammâm frequently; but not so often as the men. When the bath is not hired for the females of one family, or for one party of ladies exclusively, women of all conditions are admitted. In general all the females of a house, and the young boys, go together. They take with them their own seggádehs, and the napkins, basins, etc., which they require, and even the necessary quantity of sweet water for washing with soap, and for drinking; and some carry with them fruits, sweetmeats, and other refreshments. A lady of wealth is also often accompanied by her own belldineh or mashtah, who is the washer and tire-woman. Many women of the lower orders wear no covering whatever in the bath, not even a napkin round the waist; others always wear the napkin and the high clogs. There are few pleasures in which the women of Egypt delight so much as in the visit to the bath, where they frequently have entertainments; and often, on these occasions, they are not a little noisy in their mirth. They avail themselves of the opportnnity to display their jewels and their finest clothes, and to enter into familiar conversation with those whom they meet there, whether friends or strangers. Sometimes a mother chooses a bride for her son from among the girls or women whom she chances to see in the bath. On many occasions, as, for instance, in the case of preparations for a marriage, the bath is hired for a select party, consisting of the women of two or more families, and none else are admitted; but it is more common for a lady and a few friends to hire a Khilweh: this is the name they give to the apartment of the hanafiyeh. There is more confusion among a mixed company of various ranks; but where all are friends, the younger girls indulge in more mirth and frolic. They spend an hour or more under the hands of the bellaneh, who rubs and washes them, plaits their hair, applies the depilatory, etc. They then retire to the beyt-owwal or meslakh, and there, having put on part of their dress, or a large loose shirt, partake of various refreshments, which, if they have brought none with them, they may procure by sending an attendant of the bath to the market. Those who smoke take their own pipes with them. On particular occasions of festivity, they are entertained with the songs of two or more 'Al'mehs, hired to accompany them to the bath.' - Lane.

## (11). Intercourse with Orientals.

Orientals reproach Europeans with doing everything the wrong way, such as writing from left to right, while they do the reverse, and uncovering the head on entering a room, while they remove their shoes, but keep their heads covered.

The following rules should be observed in paying a visit at an Oriental house. The visitor knocks at the door with the iron knocker attached to it, whereupon the question 'min' (who is there?) is usually asked from within. The visitor answers, 'iftah' (open). In the case of Muslim honses the visitor has to wait outside for a few minutes in order to give the women who happen to be in the court time to retire. He is then conducted into the reception-room, where
a low divan or sofa runs round three sides of the room, the place of honour always being exactly opposite the door. According to the greater or less degree of respect which the host desires to show for his guest he rises more or less from his seat, and approaches one or more steps towards him. The first enquiries are concerning the health (see p. ccxiii); the salutation 'Salam aleikum' is reserved for Muslims. The transaction of business in the East always involves a prodigious waste of time, and as Orientals attach no value whatever to their time, the European will often find his patience sorely tried. If a visitor drops in and interrupts the business, it would be an unpardonable affront to dismiss him on the plea of being engaged. Again, when a visitor is announced at meal-time, it is de rigueur to invite him, at least as a matter of form, to partake. At all other hours of the day visitors are supplied with coffee, which a servant, with his left hand on his heart, presents to each according to his rank. Under the coffee-cup (fingân) there is generally a zarf, or kind of saucer of egg-cup shape. To be passed over when coffee is handed round is deemed by the Beduins an insult of the gravest kind. Having emptied his cup, the visitor must not put it down on the ground, which is contrary to etiquette, but keep it in his hand until it is taken from him by the servant, after which he salutes his host in the usual Oriental fashion by placing his right hand $t$ on his breast and afterwards raising it to his forehead, and pronouncing the word 'dâiman' (i.e. ''̣ahweh dâiman', may you never want coffee). This custom originated with the Beduins, who only regard the persons of their guests as inviolable after they have eaten or drunk with them. When visited by natives, the European should in his turn regale them liberally with coffee. It is also usual to offer tobacco to the visitor, the cigarette being now the ordinary form. The long pipe (shibule) with amber mouth-piece, and its bowl resting on a brazen plate on the ground, is more in vogue with the Turks. Visits in the East must of course be returned as in Europe. Those who return to a place after an absence receive visits from their acquaintances before they are expected to call on them.

Europeans, as a rule, should never enquire after the wives of a Muslim, his relations to the fair sex being sedulously veiled from the public. Even looking at women in the street or in a house is considered indecorous, and may in some cases be attended with danger. Intimate acquaintance with Orientals is also to be avoided, disinterested friendship being still rarer in the East than elsewhere. Beneath the interminable protestations of friendship, with which the traveller is overwhelmed, lurks in most cases the demon of cupidity, the sole motive of those who use them being the hope of some

[^2]gain or bakshîsh. The best way of dealing with persons who 'do protest too much' is to pay for every service or civility on the spot, and as far as possible to fix the price of every article beforehand, a plan which is usually effectual in limiting their mercenary designs.

On the other hand the most ordinary observer cannot fail to be struck with the fact that the degraded ruffianism so common in the most civilised countries is unknown in Egypt. The people of the country, even the poorest and the entirely uneducated, often possess a native dignity, self-respect, and gracefulness of manner, of which the traveller's own countrymen of a far more favoured class are sometimes utterly destitute. Notwithstanding their individual selfishness, too, the different native communities will be observed to hold together with remarkable faithfulness, and the bond of a common religion, which takes the place of 'party' in other countries, and requires its adherents to address each other as ' $y \hat{a}$ $a k h \hat{u} y a^{\prime}$ (my brother), is far more than a mere name.

While much caution and firmness are desirable in dealing with the people, it need hardly be added that the traveller should avoid being too exacting or suspicious. He should bear in mind that many of the natives with whom he comes in contact are mere children, whose waywardness should excite compassion rather than anger, and who often display a touching simplicity and kindliness of disposition. He should, moreover, do his utmost to sustain the well established reputation of the 'kilmeh frengîyeh', the 'word of a Frank', in which Orientals are wont to place implicit confidence.

## (12). Tobacco.

Cigar-smokers will find it very difficult to become accustomed to the Oriental tobacco, but they will find tolerable cigar-shops at Alexandria and Cairo, most of which have been established quite recently. As a general rule smokers are recommended to carry with them, both in going to and returning from Egypt, as little tobacco as possible, especially if they travel by the overland route, as a rigorous search is often made and a heavy duty exacted, both at the Egyptian, and at the French, Austrian, and Italian frontiers. Travellers returning to England direct, with their luggage booked through, are allowed half-a-pound of tobacco or cigars free of English duty, or they may bring three pounds on payment of the duty (5s. per lb.) and a small fine.

Tobacco (dukhân) is kept in good condition by covering it with a moist cloth, with which, however, it must not come in contact. Strong (hâmi) or mild (bârid) may be asked for according to taste. Stambuli is a long and fine cut tobacco, the best qualities of which ( $40-60 \mathrm{fr}$. per $0 \mathrm{kk} \mathrm{a}=2 \mathrm{lbs} .11 \frac{1}{2} \mathrm{oz}$.) come from Roumelia and Anatolia, and the inferior from the Greek islands. The Syrian tobacco ( $15-20 \mathrm{fr}$. per okka), which is cut less regularly, and contains parts of the stalk, is considered less drying to the palate than the Turkish.

It is of two kinds, the kûrâni, or light-brown, and the gebeli, or dark-brown, a mixture of which may be used. The latter, which derives its colour from being dried in the smoke of resinous woods, is known in Europe as 'Latakia', from the region of N. Syria where it is chiefly grown (Lâdikîyeh), but that name is not applied to it in the East. The native Egyptian tobacco (dukhân beledi, or akhdar, green tobacco) is of very inferior quality (about 15 piastres per okta). The natives often gather the leaves from the plant, dry them in the sun, rub them to pieces, and smoke them quite fresh. Tumbâk, or Persian tobacco, is used in a moistened condition in the long nargilehs or water-pipes only, and is lighted with a particular kind of charcoal. The smoke of these pipes is drawn into the lungs.

## II. Geographical and Political Notice.

a. Boundaries and Area (comp. Map, p. xxxii). Egypt proper, the country between the mouth of the Nile and the First Cataract, is a small region with well defined natural boundaries on three sides. On the N. is the Mediterranean Sea, on the E. the Arabian Desert and the Red Sea, and on the W. the Libyan Desert. The S. boundary is not marked by any natural feature, and has therefore at all ages been liable to alteration. Its fluctuations, sometimes to the N., sometimes to the $S$., form a kind of standard of the fluctuating political power of Egypt, and the causes of the fluctuations involve a great part of Egyptian history from the most ancient times down to the present day.

When Mohammed 'Ali, the founder of the modern vassal kingdom of Egypt, died in 1848, he bequeathed to his successor a power extending far to the S. of the First Cataract, and including not only the Nubian Valley of the Nile, with the Nubian desert regions, but also the so-called Egyptian Sûdân, consisting of the districts of Tâka, Sennâr, and Kordofân. The Khedive Isma'̂̂l extended his boundaries still farther to the S., S.E., and S.W. Thus he purchased Suâkin and Masau'a on the Red Sea, and Zêla and Berbera on the Gulf of 'Aden, four important seaports and commercial places, together with the coast districts adjoining them, which formerly belonged directly to the Turkish government; and in the same way he acquired part of the Somâli coast. The districts of the Bogos and Galabat on the frontiers of Abyssinia were occupied, and together with the Somâli territory of Harar were annexed to the Egyptian empire, while Dâr-Fûr, once an entirely independent principality in the Mohammedan Sûdân, and the terror of its neighbours, was also conquered by the Egyptians.

The boundaries of Egypt in a due S. direction were still more boldly extended by Isma'ill, until they comprised the whole course of the White Nile and the greater part of the river region of the Bahr el-Ghazâl, and finally extended to about $2^{\circ} \mathrm{N}$. latitude. But

these territories were lost again even more rapidly than they bad been won. The rebellion of the Arab tribes that broke out in 1883 under the Mahdi (p. cxxxi) not only utterly destroyed the new Egyptian power on the White Nile, but also wrested the entire Sûdân as far as Lower Nubia from the Khedive. Thus, while Egypt at the beginning of 1883 was, nominally at least, as extensive as two-thirds of Russia in Europe, it has now shrunk to a district which, in its productive and inhabited part, is no larger than Belgium. Its nominal boundary, indeed, which embraces the great Libyan Desert with five Oases (p. Ixiii), and the greater part of the Sinai Peninsula, still encloses an area officially estimated at nearly 390,000 square miles. In 1882 the inhabited territory as far S . as Wâdi Halfa was estimated at $12,830 \mathrm{sq}$. M., of which only 9460 sq . M. were actually under cultivation.
b. Divisions and Administration. The ancient prehistoric Egyptians were at first subdivided into numerons tribes, who formed a number of distinct small and independent states, with their own laws and their peculiar tutelary gods. These states were afterwards gradually united into the two large principalities of Lower Egypt or the Northern Country (To Mera, or To Meh), and Upper Egypt or the Southern Country (To Res, or To Kemâ). At a later period these two larger states, united under one sceptre, formed the empire of the Pharaohs, or the land of Kemi. The smaller states then constituted provinces or nomes (Egyptian hesoph; Greek nomoi). The ancient Egyptians divided each nome into four principal parts: - (1) The capital (Nut), the religious and administrative centre of the province; (2) The cultivated land (Un), subject to the annual inundation; (3) The marshy land which remained in a moist condition after the inundation; (4) The district traversed by canals conducted out of the Nile. The civil and military administration of the nome was presided over either by hereditary governors (hik), or by nomarchs (mer-nat-t'at-to) appointed by the king. Under the Ptolemies these governors were called strategoi (nomu) or nomarchoi, and over a group of these presided an epistrategos. The chief authority in religious matters was the high priest of the temple, whose appointment was sometimes hereditary and sometimes elective; and his staff consisted of a prophet, a templescribe, a stolistes or custodian of the vestments, and an astrologer.

The number of the nomes varied at different periods. Most of the classical authors (thus Diodorus, liv. 3; Strabo, xxviii. 1, 3) enumerate thirty-six. The Egyptian lists, such as that of Edfu, mention forty-four, half of them being in Upper and half in Lower Egypt (but two of those in Upper Egypt and three in Lower Egypt are counted twice). The Greeks and Romans sometimes divided Egypt into three parts - Upper, Central, and Lower Egypt, or the Thebaïs, Heptanomis, and Delta.

The following is a list of the ancient Egyptian nomes:
Baedeker's Egypt I. 3rd Ed,

UPPER EGYPT.

|  | NOMES |  | OAPITALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Egyptian | Greek | Egyptian | Greek | Arabic |
| 1 | TO KENS | OMBITES | ABU (Elepphan-tine-GeziretAssuân) | $\underset{\text { NUBI) }}{\text { OMBUS (Egypt. }}$ | KOM OMBU |
| 2 | TES HOR | $\begin{aligned} & \text { APOLLINOPOLI- } \\ & \text { TES } \end{aligned}$ | TEB (Copt. Atro) | APOLLINOPOLIS MAGNA | EDFU |
| 3 | TEN | LATOPOLITES | NEKHEB (SNI) | EILEITHYIA (LATOPOLIS) | ESNEH |
| 4 | UAS | DIOSPOLITES <br> PHATYRITES <br> HERMONTHITES | NI AMON, afterwards HER MONT (an besan munt) | THEBAI <br> Diospolis magna Hermonthis | $\begin{aligned} & \text { EL UKSURR } \\ & \text { KARNAK. } \\ & \text { MEDINNET } \\ & \text { ABU } \\ & \text { ERMENT } \end{aligned}$ |
| 5 | HORUI | KOPTITES | $\underset{\text { Kebto })}{\text { QEFTI }}$ | KOPTUS | KUFT |
| 6 | ? EMSUH ? | TENTYRITES | $\left\lvert\, \begin{gathered} \text { TA RER, TAN TA } \\ \text { RER (TA NOTRI; } \\ \text { Copt. PI TENT- } \\ \text { ORE) } \end{gathered}\right.$ | TENTYRIS <br> (TENTYRA) | DENDERA |
| 7 | HA SEKHEKH | DIOSPOLITES | HA, HU | $\left\lvert\, \begin{gathered} \text { DIOSPOLIS } \\ \text { PARVA } \end{gathered}\right.$ | HÛ |
| 3 | TENAI (?) | TINITES | TIN (Teni), after- wards $\mathrm{AB}-\mathrm{TU}$ | $\begin{aligned} & \text { TIS (Tinis), } \\ & \text { ABYDUS } \end{aligned}$ | $\left\{\begin{array}{c} \text { KHARABEH } \\ \text { EL } \\ \text { MADFUNEH } \end{array}\right.$ |
| 9 | KHEM | PANOPOLITES | APU, KHEDI (Copt. Khmin, Shmin) | $\underset{\text { NOPOLIS })}{\text { CHEMMIS }}$ | AKHMM |
| 10 | TUF | ANTAOPOLITES | NI ENT BAK | ANTEOPOLIS | KAU EL KEBÎR |
| 11 | BAAAR | HYPSELITES | SHAS HOTEP <br> (Copt. SHôtr) | HYPSELE (IS) | SAŢB |
| 12 | ATEF KHENT | LYKOPOLITES | SIAUT (Copt. Siut) | LYKOPOLIS | ASYÛT |
| 13 | ATEF PEḤU |  | QU | CHUSAI | Ķ̂SÎYEH |
| 14 | UAZ |  | TEBTI |  |  |
| 15 | UNNU | HERMOPOLITES | SESUNNU (Copt. Shmun) | HERMOPOLIS | $\underset{\hat{N E N}}{\text { ASHMU- }}$ |
| 16 | MEH | Northern part of HERMOPOLITES | $\begin{aligned} & \text { HEBENNU (Copt. } \\ & \text { TUHO) } \end{aligned}$ | $\begin{gathered} \text { THEODOSIO- } \\ \text { POLIS } \end{gathered}$ | ? TAHA EL MEDÎNEH |
| 17 | ANUP | KYNOPOLITES | KO, HA SUTEN | KYNOPOLIS | EL KÊS |
| 18 | UAB | OXYRRHYNCHITES | $\underset{\text { PEMEE })}{\underset{\text { PA MAZA }}{\text { MEM }} \text { (Copt. }}$ | $\boldsymbol{O X Y R}_{\text {CHUS }}^{\text {OXYN- }}$ | BEHNESA |

UPPER EGYPT.

|  | NOMES. |  | CAPITALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Egyptian | Greek | Egyptian | Greek | Arabic |
| 19 | NEḤT KHENT | $\underset{\substack{\text { HERACLEOPO- } \\ \text { LITES }}}{ }$ | HA KHNEN SU (Copt. Hnés) | HERACLEOPO- LIS MAGNA | AHNÂS EL MEDÎNEH |
| 20 | PA |  | He BENNU | HIPPONON |  |
| 21 | NEHT PEHT | $\cdots$ | MERI TUM (Меїтбm) |  | MĖDUM |
|  |  | ARSINOITES | SHED | $\begin{array}{\|c} \text { KROKODILO- } \\ \text { POLIS } \end{array}$ | MEDINET <br> EL fayûd |
| 22 | MATENNU | $\underset{\text { LITES }}{\text { APHRODITOPO- }}$ | TEP AḤE | $\begin{array}{\|l} \text { APHRODITO- } \\ \text { POLIS } \end{array}$ | AṬFIṬ |

LOWER EGYPT.

|  | \|ANEB HAT | MEMPHITES | $\left\lvert\, \begin{gathered}\text { MEN NOFER (HA } \\ \text { KA PTAḤ) }\end{gathered}\right.$ | MEMPHIS |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | AA | LETOPOLITES | SOKHEM | LETOPOLIS |  |
| 3 | AMENT | NOMOS LIBYa | NI ENT HA PI | APIS |  |
| 4 | SEPI RES | SAİTES | ZOQA | CANOPUS |  |
| 5 | SEPI EMHIT | SAÏTES | SAI | SAİS | $\underset{\text { Sî }}{\mathrm{A}} \mathrm{EL}$ |
| 6 | KA-SIT | XOITES | KHESAUU | xoïs |  |
| 7 | AMENT | ? | SONTINOFER | METELIS | ? |
| 8 | . ABOT | SETHROÏTES | PI-TUM (Soko | (SETHROË) | ? |
| 9 | AT PI | BUSIRITES | P-USIR-NEB-TTAT | BUSIRIS |  |
| 10 | KA KEM | ATHRIBITES | HA TA HilR AB | ATHRIBIS | TELL |
| 11 | KA Hebes | CABASITES | KA HEBES | Cabasus |  |
| 12 | KA THEB | SEBENNYTES SUPERIOR | THEB EN NUTER | SEBENNYTUS | $\begin{gathered} \text { SEMEN- } \\ \text { NÛD } \end{gathered}$ |
| 13 | HAQ-AT | HELIOPOLITES | ANU | HELIOPOLIS |  |
| 14 | KHENT ABOT | TANITES | ZOAN PIRAMSES (ZOAN-RAMSES) | TANIS | SAN |
| 15 | THU | HERMOPOLITES | PI TḤUT | HERMOPOLIS |  |
| 16 | KHAR | MENDESIUS | PIBI NEB TPAT | MENDES | $\begin{gathered} \text { ? TMEY EL } \\ \text { AMDID? } \end{gathered}$ |
| 17 | SAM HUT | DIOSPOLITES | $\begin{aligned} & \text { PI KHUN EN } \\ & \text { AMEN } \end{aligned}$ | TACHNAMUNIS or DIOSPOLIS |  |
| 18 | AM KHENT | BUBASTITE | PI BAST | BUBASTIS | TELL |
| 19 | AM PEḤU | $\begin{aligned} & \text { BUTICUS, or } \\ & \text { PTHENOTES } \end{aligned}$ | PI UZO | BUTO |  |
| 20 | LAPT | PHARBETHITES | KESEM | PHAKUSA | HORBEAT |

Lower and Upper Egypt are now each divided into seven Provinces or Mudîrîyeh. Upper Egypt, known as Saîd, beginning a little to the N. of Beni Suêf, formerly extended to the First Cataract only, but is now prolonged to the S. to Wâdi Halfa. The provinces of Lower Egypt are: (1) Kalyûb, at the head of the Delta; (2) Sharkîyeh, i.e. 'the eastern', with Zakàzîk as its capital; (3) Dakahlîyeh, with Manṣ̂̂ra as its capital; (4) Menûf; (5) Gharbîyeh, i.e. 'the western', with Țanṭa as its capital ; (6) Behêreh, i.e. 'of the lake', with Damanhûr as its capital ; (7) Gizeh, opposite to Cairo. The following capitals and commercial towns are presided over by governors of their 0 wn , and are independent of the provincial administration: Cairo, Alexandria, Suez, Port Saîd, Damietta, Rosetta, Isma'îlîya, and lastly the small seaport of Kosêr on the Red Sea. The seven Upper Egyptian provinces are those of Beni-Suêf, Minyeh, Siût, Girgeh (Sûhâg), Keneh, Esneh, and Wâdi Ḥalfa. The Fayûm forms a mudîrîyeh by itself.

The chief official in every province is the Mudir, or governor, who is assisted by a council, or 'dîwân', of other officers. This council consists of a Wekîl, or vice-governor; a chief clerk, tax-gatherer, and accountant, who is always a Copt; a $K \hat{a} d i$, or supreme judge, and the chief authority in spiritual matters; sometimes the president of a chamber of commerce and chief authority in civil affairs; a superintendent of police; an architect for the supervision of canals and other public works; and lastly the chief physician of the province. The sub-governors in the smaller towns, who are under the jurisdiction of the Mudîr, are sometimes called Kâshif, or Nâzuir el-Kism. Subordinate to the nâzir again is the Shêkh el-Beled, or chief magistrate or mayor of the village, usually known simply as shêkh (plur. shiûlch).

In the larger towns there is a magistrate of this kind in each quarter (at Cairo fifty-three), over whom are placed prefects of larger sections (shêhh et-tumn). Over the whole of these presides the Mudîr, and lastly over the latter in some cases a Hokmdâr with very extensive powers. Other provinces again are governed by specially appointed inspectors, who occupy the highest rank in their respective jurisdictions.
c. Population. The population of Egypt has been ascertained to have been greater in ancient than in modern times; for, disregarding the exaggerated calculation of Theocritus, based on a mere assumption, it appears to have numbered at least $71 / 2$ million souls in the time of Josephus and the Emperor Nero. This number is quite reasonable in itself, as it is estimated that the country could support 8-9 million inhabitants.

According to the enumeration made by Amici Bey in 1882 the population of Egypt proper as far as Wâdi Halfa is $6,811,448$, or about 600 per square mile, and is therefore denser than that of most European states. The thickest population is found in the province
of Esneh, the thinnest in the Fayûm and in Beḥêreh. The sexes occur in almost equal proportions. The number of houses enumerated in the same census is $1,090,000$, distributed among 12,876 towns, villages, and hamlets.
d. Origin and Present Condition of the Egyptians (by Dr. G. Schweinfurth of Cairo). For thousands of years the banks of the Nile have been occupied by the Egyptians, the oldest nation known to history, and still exhibiting many of their ancient personal characteristics unaltered. Notwithstanding the interminable series of immigrations and other changes affecting the character of the inhabitants, the Egyptian type has always predominated with marvellous uniformity. As Egypt is said to be the 'gift of the Nile', so has the character of its inhabitants been apparently moulded by the influences of that river. No country in the world is so dependent on a river which traverses it as Egypt, and no river presents physical characteristics so exceptional as the Nile; so, too, there exists no race of people which possesses so marked and unchanging an individuality as the Egyptians. It is therefore most probable that this unvarying type is the product of the soil itself, and that the character of the peoples who settled at different periods on the bank of the Nile, whatever it may originally have been, has in due course of time been moulded to the same constant form by the mysterious influences of the river. In all countries, indeed, national characteristics are justly regarded as the natural outcome of soil and climate, and of this connection no country affords so strong an illustration as Egypt, with its sharply defined boundaries of sea and desert, and in its complete isolation from the rest of the world. These considerations tend to throw serious doubts on all the current theories as to the origin of the Egyptians. According to the Bible, Mizraim (Miṣraîm) was the son of Ham and brother of Canaan and the Ethiopian Cush; and, as his name was applied by the Hebrews to Egypt, it is probable that he migrated with his sons from Asia to the banks of the Nile. The name, moreover, of Ludim, his eldest son, corresponds to the word Rotu, or Lotu, the hieroglyphic name for the Egyptians. Philologists, who have discovered points of resemblance in the roots and inflections of the ancient Egyptian and the Semitic languages, likewise come to the conclusion that the Egyptians originally came from Asia, either by way of Suez, or across the Red Sea from Arabia. The ethnographert, on the other hand, who observes that many of the

[^3]domestic utensils employed by the ancient Egyptians, as well as many of their customs, are similar to those of the dwellers on the banks of the Zambezi and Niger, but totally different from those seen on the banks of the Indus or Euphrates, will always maintain an opposite view. The considerations already mentioned, however, tend to show that the truth lies between these extremes. Even those who most strongly maintain the Asiatic origin of the Egyptians will probably admit that the immigrants found an aboriginal race already settled on the banks of the Nile, which in its persistent opposition to all foreign influences was doubtless similar to the race usually known as the Egyptian. We start with the cardinal fact, that, although the country has been at various periods overrun by Hyksos, Ethiopians, Assyrians, Persians, Greeks, Romans, Arabs, and Turks, and although the people were tyrannised over, ill-treated, and in most cases compelled to intermarry with these foreigners, the Egyptians have for thousands of years retained the same unvarying physical types, while their character has been but slightly modified by the introduction of Christianity and Mohammedanism. If it now be borne in mind that these foreigners generally invaded the country in the form of an army, that tbey formed but a small body compared with the bulk of the population, and that they either married native women or sought wives in other countries, it is obvious that they would either continue to exist for a time as a foreign caste, a condition apparently repugnant to nature and necessarily transient, or that they would gradually succumb to the never-failing influences of the soil and be absorbed in the great mass of the aboriginal inhabitants. An excellent illustration of this process is afforded by the Arabian invasion, with the circumstances and results of which we are better acquainted than with the history of the other foreign immigrations ; for, disregarding the Beduin tribes, who are entirely distinct from the Egyptian population, we now find that the Arabian element has entirely disappeared, and we meet with genuine Arabs in the towns only, where the merchants, pilgrims, and other members of that people form a class entirely distinct from the natives, and where their existence is only maintained by means of reinforcements from abroad. Another proof of the transforming influences of the Egyptian climate is afforded by the uniform character of the domestic animals. The oxen, in particular (which, however, are gradually being replaced by the buffalo), though they have often been repeatedly exterminated in a single century by murrain, and have been succeeded by foreign races from every quarter of the globe, invariably after a few generations assume the well-known Egyptian type with which the representations on the ancient temples render us so familiar.

The Modern Egyptians. The population of Egypt is composed of the following ten different elements.
(1). The Fkllậ̣inin (sing. fellâh), the 'tillers' or 'peasants', form the bulk of the population, and may be regarded as the sinews of the national strength. They are generally slightly above the middle height; their bones, and particularly their skulls, are strong and massive; and their wrists and ankles are powerful and somewhat clumsy. In all these respects the fellâhîn, as well as their domestic animals, contrast strongly with the inhabitants of the desert, the fellâh and the Beduin differing from each other precisely in the same points as their respective camels. Notwithstanding this largeness of frame, however, the fellàh never grows fat. The woman and girls are particularly remarkable for their slender build, and they often speak of each other as 'zei el-habl', or slender as a rope. The men generally keep their heads shaved, but the hair of the soldiers and the long tresses of the girls, though always black and often curly, is by no means of the short, woolly negro type.

The chief peculiarity of the Egyptians is the remarkable closeness of their eyelashes on both lids, forming a dense, double, black fringe, which gives so animated an expression to their almondshaped eyes. The very ancient and still existing custom of blackening the edges of the eyelids with antimony ('kohl'), which is said to serve a sanitary purpose, contributes to enhance this natural expression. The eyebrows are always straight and smooth, never bushy. The mouth is wide and thick-lipped, and very different from that of the Beduin or inhabitant of the oases. The high cheekbones, the receding forehead, the lowness of the bridge of the nose, which is always distinctly separated from the forehead, and the flatness of the nose itself, are the chief characteristics of the Egyptian skull; but, as the jaws project less than those of most of the other African coloured races, it has been assumed that the skull is Asiatic, and not African in shape. The Egyptian peasantry have a much darker complexion than their compatriots in the towns, and their colour deepens as we proceed southwards, from the pale brown of the inhabitant of the Delta to the dark bronze hue of the Upper Egyptians. There is also a difference between the tint of the Nubians and that of the Upper Egyptians, even where they live in close contiguity, the former being more of a reddish-brown.

The dwelling of the fellâh is of a miserably poor description, consisting generally of four low walls formed of crude bricks of Nile mud, and thatched with a roof of dura straw, rush, rags, or old straw-mats. In the interior are a few mats, a sheep's skin, several baskets made of matting, a copper kettle, and a few earthenware pots and wooden dishes. Instead of using the crude bricks, the fellâhîn in Upper Egypt often form the walls of their huts of a mixture of mud and straw. The dark, windowless interior is entered by a small opening, in front of which the proprietor usually forms an enclosure of circular shape, with a wall of mud about 5 ft . in height. This is the court-yard of the establishment, and the
usual resort of the family and their domestic animals in summer. The walls of the yard generally contain round hollows, used as receptacles for the grain which forms the food of the family. Within the yard are usually placed a square pillar, about 5 ft . in height, with openings in its sides as receptacles for objects of value, and a thick column of the same height, terminating in a platform shaped like a plate, with the edges bent upwards, which is used by the proprietor as a sleeping-place in hot weather. The fact is, that beneath an Egyptian sky, houses are not of the same paramount importance as in more northern regions, all that is wanted being shelter for the uight.

The poorer peasant's mode of life is frugal in the extreme. The staple of his food consists of a peculiar kind of bread made of sorghum flour in Upper Egypt, or of maize in the Delta, wheaten bread being eaten by the wealthier only. This poor kind of bread often has a greenish colour, owing to an admixture of bean-flour (Fonum Græcum). Next in importance in the bill of fare are broad beans (fûl). For supper, however, even the poorest cause a hot repast to be prepared. This usually consists of a highly salted sauce made of onions and butter, or in the poorer houses of ouions and linseed or sesame oil. Into this sauce, which in summer acquires a gelatinous consistency by the addition of the universal bàmia (the capsular fruit of the Hibiscus) and various herbs, each member of the family dips pieces of bread held in the fingers. Both in town and country, goats', sheeps', or buffaloes' milk also forms a daily article of food, but always in a sour condition or half converted into cheese, and in very moderate quantities only. In the height of summer the consumption of fruit of the cucumber and pumpkin species, which the land yields in abundance, is enormous. In the month of Ramadan alone, when a rigorous fast is observed during the day, and on the three days of the great Beiràm festival (Korbân Beiràm), even the poorest members of the community indulge in meat, and it is customary to distribute that rare luxury to beggars at these seasons.

The dress of the Egyptian peasant calls for little remark, especially as he usually works in the fields divested of everything. The chief articles of his wardrobe at other times are an indigo-dyed cotton shirt ( $k a m \hat{\imath} s$ ), a pair of short and wide cotton breeches, a kind of cloak of brown, home-spun goats' wool (za'bût, 'abayeh, or 'aba), or simply a blanket of sheep's wool (hirâm), and lastly a closefitting felt skull-cap (libdeh). He is generally barefooted, but occasionally wears pointed red (zerbûn), or broad yellow shoes (balgha). The shêkhs and wealthier peasauts, when they go to market, wear wide, black woollen cloaks and the thick red 'Tunisian' fez (tarbûsh) with a blue silk tassel, round which they coil a white or red turban ('immeh). In their hands they usually carry a long and thick stick (nabbût), made of ash imported from Caramania.

The agricultural population of Egypt does not exceed two million souls, an unnaturally low proportion when we consider the uature of the country. The sole wealth of Egypt is derived from its agriculture, and to the fellâhîn alone is committed the important task of tilling the soil. They are, indeed, neither fitted nor inclined for other work, a circumstance which proves how completely the stationary character of the ancient Egyptians has predominated over the restless Arabian blood, which has been largely infused into the native population ever since the valley of the Nile was conquered by the armies of El-Islâm. The modern Egyptians, moreover, resemble the ancient in the lot to which they are condemned. In ancient times the fellâh, pressed into the service of the priests and the princes, was compelled to yield up to them the fruits of his toil, and his position is nearly the same at the present day, save that the names of his masters are changed, and he has obtained some relief owing to the almost entire abolition of compulsory work.

In early life the Egyptian peasant is remarkably docile, active, and intelligent, but at a later period this freshness and buoyancy is crushed out of him by care and poverty and his never-ceasing task of filling the pitcher of the Danaides. He ploughs and reaps, toils and amasses, but he cannot with certainty regard his crops as his own, and the hardly earned piastre is too frequently wrested from him. His character, therefore, becomes like that of a gifted child, who has been harshly used and brought up to domestic slavery, but at length perceives that he has been treated with injustice, and whose amiability and intelligence are then superseded by sullemess and obstinacy. Thus, as in the time of Ammianus Marcellinus, the fellâh will often suffer the most cruel blows in dogged silence rather than pay the taxes demanded of him.

In his own fields the fellâh is an industrious labourer, and his work is more continuous than that of the peasant of more northern countries. He enjoys no period of repose during the winter, and the whole of his spare-time is occupied in drawing water for the irrigation of the land. Notwithstanding his hard lot, however, he is an entire stranger to any endeavour to better his condition or to improve his system of farming. As soon as he has accomplished the most necessary tasks he rests and smokes, and trusts that Allàh will do the remainder of his work for him.

The fellâh is a believer in the religion of Mohammed, although he knows but little of the prophet's doctrines and history. Followers of all other religions he believes to be doomed to eternal perdition; but travellers are not on that account disliked by him. We serve rather to confirm his belief in eternal justice, for he is convinced that all the comforts and luxuries we now enjoy will be counterbalanced by torments hereafter. At the same time he admires and overrates our knowledge, which is so superior to his own. Every well-dressed European is in the estimation of the natives a prodigy
of wisdom; and, as their ideas of a scholar and a physician are identical, they place implicit reliance on our ability to heal the sick and to save the dying. The traveller who comes in contact with the fellâhîn will often be applied to for medicine, and will often find drugs more effective than money in securing their good will.
(2). Copts (lü̈bt, übt). While we have regarded the fellâhîn as genuine Egyptians in consequence of their uninterrupted occupation of the soil, the religion of the Copts affords us an additional guarantee for the purity of their descent. The Copts are undoubtedly the most direct descendants of the ancient Egyptians, there being no ground for the assumption that their ancestors were foreign immigrants who embraced Christianity after the conquest of the country by the Mohammedans, while on the other hand the obstinacy with which they defended their monophysite Christianity for several centuries against the inroads of the creed of Byzantium affords another indication of their Egyptian character. The Coptic population is officially stated as 250,000 , but these figures are obviously too low, and the number is more probably about 400,000 , i.e. about a fifth of the purely indigenous population of the valley of the Nile. $t$ They are most numerous in the towns of Northern Egypt, around the ancient Coptos, at Negâda, Luḳsor, Esneh, Dendera, Girgeh, Tahṭa, and particularly at Siûṭ and Akhmîm. A large proportion of the population of all these places is Coptic.

The Coptic Patriarch is elected from their own number by the monks of the five chief monasteries of Egypt. These are the monasteries of St. Anthony and St. Paul in the western desert, the two in the valley of the Natron Lakes, and the large convent of Marrag, near Monfalutu.

Most of the Copts are dwellers in towns, and are chiefly engaged in the more refined handicrafts (as watchmakers, goldsmiths, jewellers, embroiderers, tailors, weavers, manufacturers of spurious antiquities, etc.), or in trade, or as clerks, accountants, and notaries. Dheir physique is accordingly materially different from that of the fellâhîn. They are generally somewhat below the middle height, and of delicate frame, with small hands and feet; their skulls are higher and narrower than those of the peasantry, and with less protruding cheek-bones; and, lastly, their complexion is fairer. These differences are sufficiently accounted for by their mode of life; for, when we compare those Copts who are engaged in rustic pursuits, or the Coptic camel drivers of Upper Egypt, with the fellầḥîn, we find that the two races are not distinguishable from each other. The two distinct types have also been recognized in the skeletons of the ancient mummies.

Few nations in the East embraced the Gospel more zealously than the dwellers on the Nile. Accustomed as they had long been to regard life as a pilgrimage to death, as a school of preparation for

[^4]another world, and weary of their motley and confused Pantheon of divinities, whose self-seeking priesthood designedly disguised the truth, they eagerly welcomed the simple doctrines of Christianity, which appeared so well adapted to their condition and promised them succour and redemption. Like Eutyches, they revered the divine nature of the Saviour only, in which they held that every human element was absorbed; and when the Council of Chalcedon in 451 sanctioned the doctrine that Christ combined a human with a divine nature, the Egyptians, with their characteristic tenacity adhered to their old views, and formed a sect termed Eutychians, or Monophysites, to which the Copts of the present day still belong.

The name of the Copts is an ethnical one, being simply an Arabic corruption of the Greek name of Egyptians. The theory is now exploded that they derive their name from a certain itinerant preacher named Jacobus, who according to Makrîzí was termed El-Berâdi'i, or 'blanket-bearer', from the old horse-cloth worn by him when he went about preaching. This Jacobus promulgated the monophysite doctrine of Eutyches, which had found its most zealous supporter in Dioscurus, a bishop of Alexandria, who was declared a heretic and banished after the Council of Chalcedon; and his disciples were sometimes called Jacobites. If this name had ever been abbreviated to Cobit or Cobt, it would probably have occurred frequently in the writings of Monophysites; but there we find no trace of it. It is, on the other hand, quite intelligible that the word Copt, though originally synonymous with Egyptian, should gradually have come to denote a particular religious sect; for, at the period when the valley of the Nile was conquered by 'Amr, the native Egyptians, who almost exclusively held the monophysite creed, were chiefly distinguished by their religion from their invaders, who brought a new religious system from the East.

These Egyptian Christians strenuously opposed the resolutions of the Council of Chalcedon, and thousands of them sacrificed their lives or their welfare in the fierce and sanguinary conflicts of the 6th century, the causes of which were imperfectly understood by the great majority of the belligerents. The subtle dogmatic differences which gave rise to these wars aroused such hatred among these professors of the religion of love, that the defeated Monophysites readily welcomed the invading armies of El-Islâm, or perhaps even invited them to their country.

After the conquest of Egypt by 'Amr the Copts were at first treated with lenity, and were even appointed to the highest government offlces; but they were soon doomed to suffer persecutions and privations of every description. These persecutions were mainly due to their unbounded arrogance and their perpetual conspiracies against their new masters, and their Mohammedan contemporaries even attributed to them the disastrous conflagrations from which the new capital of the country so frequently suffered (p. 36). Accustomed for many ages to regard themselves as the most civilised of nations, and the Greeks as their inferiors, they perhaps imagined, that, if they succeeded in throwing off the yoke of the barbarous children of the desert, they could prevent the revival of the hated Byzantine supremacy. Their hopes, however, were doomed to bitter
disappointment, and their national pride to utter humiliation. Their conquerors succeeded in maintaining their position, and though apparently at first inclined to moderation, were at length driven by the conduct and the previous example of the Copts themselves to persecute and oppress them to the uttermost.

In spite, however, of all these disasters, a numerous community of Copts has always existed in Egypt, a fact which is mainly to be accounted for by the remarkable tenacity and constancy of the Egyptian character. Owing, however, to the continual oppression and contempt to which they have been subjected, the grave disposition of the subjects of the Pharaohs has degenerated into tullen gloom, and their industry into cupidity. The rancour which they have so long cherished has embittered their character, while the persecutions they have suffered have taught them to be at one sime cringing, and at another arrogant and overbearing. They are in very few respects superior to their Mohammedan countrymen. They generally possess an hereditary aptitude for mathematical science, and are therefore in great request as book-keepers and accountants, but on the other hand they are entirely destitute of the generous and dignified disposition of the Arabs. They obey their law which forbids polygamy, but constantly abuse that which permits them to indulge in spirituous liquors, drunkards being frequently met with, even among their priests. Their divine worship will strike the traveller as strange, and anything but edifying or elevating (comp. p. 84).

The traveller may distinguish the Copts from the Arabs by their dark turbans, which are generally blue or black, and their darkcoloured clothes. This costume was originally prescribed by their oppressors, and they still take a pride in it as a mark of their origin, though now permitted to dress as they please. A practised eye will also frequently detect among them the ancient Egyptian cast of features. Towards strangers the Copt is externally obliging, and when anxious to secure their favour he not unfrequently appeals to his Christian creed as a bond of union. Many Copts have recently been converted to Protestantism by American missionaries, particularly in Upper Egypt, chiefly through the foundation of good schools and the distribution of cheap Arabic Bibles. Even the orthodox Copts have a great reverence for the sacred volume, and it is not uncommon to meet with members of their sect who know the whole of the Gospels by heart. The Roman propaganda, which was begun by Franciscans at the end of the 17th and beginning of the 18th cent., has been less successful among the Copts, and there now exist a few small Roman Catholic communities in Upper Egypt only (at Girgeh, Akhmîm, and Negâda). To the Romanists, however, is partly due the preservation of the old Coptic language, into which they caused the gospels to be translated by the most learned scholars of the day (accompanied by a preface asserting the supremacy of
the pope) for circulation in Egypt. Notwithstanding the serious defects to which we have alluded, the Coptic community boasts of a number of highly respectable members, and in spite of the frequent heavy contributions levied from the sect by previous governments, it contains several wealthy landowners and merchants, some of whom we shall hereafter have occasion to name.
3. Bedurns. Bedu (sing. bedawi) is the name applied to the nomadic Arabs, and 'Arab to those who immigrated at a later period and settled in the valley of the Nile. They both differ materially from the dwellers in towns and from the fellâhîn, who usually call themselves 'Sons of the Arabs' (Ibn el-‘Arab). The subdivisions of the Beduin tribes are called Kabîleh (whence the name Kabyles, applied to some of the Algerian Beduins). Though differing greatly in origin and language, the wandering tribes of Egypt all profess Mohammedanism. Again, while some of them have immigrated from Arabia or Syria, partly in very ancient, and partly in modern times, and while others are supposed to be the aboriginal inhabitants of the territories claimed by them (as the Berbers of N. Africa and the Ethiopians or Blemmyes of Nubia), or former dwellers on the Nile expelled from their homes by foreign invaders, they all differ greatly from the stationary Egyptian population; and this contrast is accounted for by the radical difference between the influences of the desert and those of the Nile valley. The Beduins may be divided into two leading groups: (1) Beduins in the narrower sense, i. e. Arabic speaking tribes, most of whom have probably immigrated from Arabia or Sy ria, and who occupy the deserts adjoining Central and Northern Egypt, or who are to be found in different regions of Southern Nubia as a pastoral people; (2) 'Bega', who range over the regions of Upper Egypt and Nubia situated between the Nile and the Red Sea, and extending to the frontiers of the Abyssinian mountains (their territory being known as 'Edbai'). To these last the name of Ethiopians may as accurately be applied as that of Arabs to the first group; and they are believed by Dr. Lepsius to be the descendants of the Blemmyes, who occupied the Nubian part of the valley of the Nile down to the 4th cent. after Christ, when they were expelled by 'Nubian' invaders from the south. The second group consists of three different races, the Hadendoa, the Bisharin, and the Ababdeh. The last-named, who are widely scattered in the valleys of the desert between the tropics and the latitude of Keneh and Kosêer, and who lead a poverty-stricken life with their very scanty stock of camels and goats, are those with whom alone we have to deal as inhabitants of Egypt. Though closely resembling the other Bega tribes in appearance, the Ababdeh (sing. Abâdi, the Gebadei of Pliny) possess an original language of their own ('to-bedyawîyeh'), which, however, they have long since exchanged for bad Arabic. Besides the girdle round their loins they wear a kind of long white
shirt, and in winter a light-coloured striped woollen mantle, while the Bisharîn and Hadendoa tend their large flocks of sheep and herds of camels in a half-naked condition, girded with a leathern apron and wrapped in a kind of blanket (melâyeh). All these 'Ethiopians' are Dolichocephali, with orthognathous skulls, and are remarkable for their fine and almost Caucasian cast of features, their very dark, bronze-coloured complexion, and their luxuriant growth of hair, shading their heads like a cloud, or hanging down in numberless plaits over their necks and shoulders, while in front it is short and curly. Their figures are beautifully symmetrical, and more or less slender in accordance with their means of subsistence, and their limbs are gracefully and delicately formed. In other respects they resemble all the other children of the desert, as in the purity of their complexion, the peculiar thinness of their necks, and the premature wrinkling of the skin of their faces. Compared with their bold and quarrelsome neighbours the Bisharîn, the Ababdeh, who are armed with a dagger worn in a sheath attached to the upper part of the left arm, or with a long, straight sword, but never with a gun, are exceedingly gentle and inoffensive. The Egyptian goverument has put an end to the old feuds between the Bisharîn and the Ababdeh by entrusting to the latter the superintendence of the great commercial route through the Nubian desert (from Korusko to Abu Hammed), and by placing the nine tribes of the Bisharîn under the jurisdiction of the chief shêkh of the Ababdeh, who is personally responsible for the safety of the routes through the desert, and is therefore obliged to reside in the valley of the Nile. (His present headquarters are at the small village of Behêreh, at the foot of the hill of Redesîyeh, opposite to Edfu.) The total number of the Ababdeh amounts to about 30,000 . The chief shêkh whose dignity is hereditary, appoints over the principal villages a number of sub-chiefs, who are appealed to as judges in family quarrels which the head of the family has been unable to settle.

The dwellings of the Ababdeh consist of low and miserable hovels constructed of stakes covered with ragged straw-mats, and placed in groups of not more than 4-8 together. They also sometimes live in caves, like genuine Troglodytes, although exposed to danger from snakes. Like the other Bega tribes, they are chiefly occupied as shepherds and camel-drivers. The wealthier purchase a little sorghum grain, which they eat either raw, or roasted, or in the form of unleavened cakes, but the poorer seem to have a marvellous power of sustaining life on homœopathically minute quantities of goats' milk and the game which they occasionally capture. The Bisharin also live exclusively on milk and a little meat, while the Arabian Beduins of the North till the soil to some extent when an opportunity offers. A considerable number of the Ababdeh and Bisharîn who live near the coast and possess no cattle or other property, subsist precariously on the produce of the sea. They are not fishermen, as
they possess no boats or other appliances, with the exception of spears and landing-nets, but merely 'Ichthyophagi', who pick up shell-fish, octopoda, or small fish thrown up on the beach. Occasionally they make a prize of turtle's eggs, and sometimes succeed in reaching the sandy islands of the Red Sea where the sea-swallow (sterna) lays its eggs. This poor mode of life of course has an influence on their mental capacity, which is not of a very high order; but they are intelligent in their 0 wn affairs, and remarkably skilful trackers, so much so that they are often employed by the government in pursuing criminals. They are nominally Mohammedans, but they do not pray, or keep the fast of Ramaḍân, or make pilgrimages, except on rare occasions. Nor do they, like orthodox Mohammedans, fear 'ginn' and 'ghûls', but they permit polygamy, observe the rite of circumcision, and worship saints.

Besides the Bega, there are numerous Beduins who inhabit the steppes and deserts belonging to the region of the Nile, but beyond the limits of Egypt, and range as far as the conflnes of the heathen negro-races on the left bank of the Nile, nearly to $9^{\circ} \mathrm{N}$. latitude; but with these we have not at present to deal. Among the Arabian Beduins of the North, there are three important tribes in the peninsula of Mount Sinai : the Terâbiyîn, who carry on a brisk caravan traffic between Suez and Cairo, and claim territorial rights as far as the banks of the Nile near Basâtîn above Cairo; the Tĥhâya, who occupy the heart of the peninsula, between Suez and 'Akaba; and the $\boldsymbol{S}$ awârkeh or $E l-$ ' Arayîsh, $^{\text {, to the north of the latter. In Upper }}$ Egypt, besides the Ababdeh, the only Beduins who occupy the eastern bank of the Nile are the Beni Wasel and the Atûni, or Hawâdât, who, however, have now settled on both banks of the Theban Nile valley and are gradually blending with the fellâhîn, and the $M \hat{a}^{\text {fazeh }}$ (about 3000 in number), who dwell in groups among the limestone mountains between Suez and Keneh, where there are good pastures at places. Most of the Arabian Beduins, on the other hand, who belong to Egypt, confine themselves to the western bank of the Nile. They occupy the whole of this side of the river from the Fayûm as far as Abydus near Girgeh, and it is mainly with their aid that communication is maintained with the western oases, peopled by a totally different race ( p . lxv), who till the ground and possess no camels, being probably allied to the Berbers of Northern Africa (one of the numerous Libyan tribes mentioned in ancient inscriptions).

The Beduins of the North have inherited with comparative purity the fiery blood of the desert tribes, who achieved such marvellous exploits under the banner of the prophet, but the traveller will rarely come in contact with them unless he undertakes a journey across the desert. The loiterers who assist travellers in the ascent of the pyramids and pester them to buy antiquities, which are generally spurious, call themselves Beduins, but, even if originally
of that race, they have entirely lost all its nobler characteristics in consequence of their intercourse with strangers and their debasing occupations. Genuine Reduins are to be found nowhere except in their desert home, where to a great extent they still retain the spirit of independence, the courage, and the restlessness of their ancestors. As in the time of Herodotus, the tent of the Beduin is still his home. Where it is pitched is a matter of indifference to him, if only the pegs which secure it be firmly driven into the earth, if it shelter his wife and child from the burning sunshine and the chilly night air, and if pasturage-ground and a spring be within reach. In consequence of the frequent wars waged between the different tribes, every Beduin is a warrior. Most of them, too, as might be expected, are extremely poor. Thus at Ramleh on the coast, near Alexandria, the traveller will have an opportunity of seeing a whole colony of the poorest class encamped in their tents, where they live in the most frugal possible manner, with a few miserable goats and the fowls which subsist on the rubbish in their neighbourhood. Though professors of El-Islâm, they are considerably less strict in their observances than the fellâhîn of the valley of the Nile, who are themselves sufficiently lax, and above all they sadly neglect the religious duty of cleanliness. They do not observe the practice of praying five times a day, and they are as a rule but slightly acquainted with the Korân. Relics of their old star-worship can still be traced among their customs.

The traveller will occasionally observe Beduins in the bazaars of the armourers and leather-merchants, and will be struck with the proud and manly bearing of these bronzed children of the desert, whose sharp, bearded features and steady gaze betoken firmness and resolution. In Egypt the traveller need not fear their predatory propensities, but they have frequently attacked travellers in Turkish Tripolitania and in the eastern part of Arabia Petræa.
(4). Arabian Dwellers in Towns. Those Arabs with whom the traveller usually comes in contact in towns are shopkeepers, officials, servants, coachmen, and donkey-attendants, or perhaps these last only, as most of the best shops are kept by Europeans, while in official and legal matters his intercourse with the natives is carried on through the medium of his consul. The indolence and duplicity of these Arabs, which proceed to some extent from the character of their religion, have often been justly condemned, while their intelligence, patience, and amiability are too often ignored. They are generally of a much more mixed origin than the fellâhîn, as the various conquerors of Egypt usually made the towns their headquarters. Alexandria, for example, was chiefly favoured by the Greeks and Arabs, and Cairo by the Arabs and Turks. It thus happens that the citizens of the Egyptian towns consist of persons of every complexion from dark brown to white, with the features of the worshippers of Osiris or the sharp profile of the Beduins, and
with the slender figure of the fellâh or the corpulence of the Turk. Among the lower classes frequent intermarriage with negro women has darkened the complexion and thickened the features of their offspring; while the higher ranks, being descended from white slaves or Turkish mothers, more nearly resemble the European type. As the inhabitants of the towns could not be so much oppressed by their rulers as the peasantry, we find that they exhibit a more independent spirit, greater enterprise, and a more cheerful disposition than the fellâhịn. At the same time they are not free from the dreamy character peculiar to Orientals, nor from a tinge of the apathy of fatalism; and their indolence contrasts strongly with the industry of their European rivals in political, scientific, artistic, and all business pursuits. A glance at the offices of the ministers, the bazaars of the merchants, the schools of the Arabs, and the buildingyards and workshops constructed by natives will enable the traveller to observe with what deliberation and with what numerous intervals of repose they perform their tasks. From such workers it is in vain to expect rapidity, punctuality, or work of a highly finished character, and the caustic remark of Prince Napoleon that the Egyptians are 'capable of making a pair of pantaloons, but never of sewing on the last button', was doubtless founded on experience. The townspeople profess Islamism, but, in their youth particularly, they are becoming more and more lax in their obedience to the Korân. Thus the custom of praying in public, outside the house-doors and shops, is gradually falling into disuse. The European dress, moreover, is gradually superseding the Oriental, though the latter is far more picturesque, and better suited to the climate $\dagger$. On the whole, however, they are bigoted Mohammedans, and share the contempt with which the felláhîn regard all other religions. Their daily intercourse with unbelievers and their dread of the power of the Christian nations tend, however, to keep their fanaticism, which otherwise would be unbounded, in check, and has even induced them to admit strangers to witness the most sacred ceremonies in their mosques.
(5). Berbers. The name Berberi (plur. barâbra) is believed by many authorities to be identical with 'barbarians', a word which is said to have been adopted by the Greeks from the Egyptians, who used it to denote all 'non-Egyptians', and to be derived from brr, i.e. 'to be unable to speak', or 'to speak imperfectly'. The 'Berbers' of N.Africa and the town of 'Berber' in S. Nubia also doubtless have the same origin. In Egypt the name is applied in a half contemptuous way to the numerous immigrants from the Nubian

[^5]Baedeker's Egypt I. 3rd Ed.
part of the valley of the Nile, who form the largest foreign element of the community, and who never entirely assimilate with it, as the Nubians make it a rule never to marry Egyptian wives. The Nubians, on the other hand, speak slightingly of the Egyptians as 'Wod-er-Rîf', or sons of the Nile valley. The two races entertain a great dislike to each other, and their dispositions are fundamentally different. The Nubians are inferior to the Egyptians in industry and energy, especially in tilling the soil, and also in physical strength; and they are more superstitious and fanatical, as is indicated by the numerous amulets they wear round their necks and arms. They are, however, superior to the Egyptians in cleanliness, honesty, and subordination, and possess a more highly developed sense of honour. The Nubian doorkeepers who are to be found in all the mercantile houses of Alexandria and elsewhere are noted for their honesty. The traveller must not expect to find them very sincerely attached or grateful, any more than the native Egyptians, but as servants they are certainly preferable. The inhabitants of the Nubian part of the valley of the Nile are not all strictly Nubians; for in the southern parts of that region a colony of Shêgîyeh and other Arabian tribes has settled in comparatively recent times. The genuine Nubians (a name unknown to themselves, and of ancient origin) occupy the valley of the Nile from Gebel Barkal near the fourth cataract down to the first cataract, and are divided in accordance with the principal idioms of their language into Mahâs, Kenûs, and Donloolas. Their language belongs to the Libyan group of the N. African tongues, and Dr. Brugsch is of opinion that it may afford a clue to the interpretation of the still undeciphered Ethiopian (Meroïtic) inscriptions of the Nubian part of the Nile valley. Dr. Lepsius, on the other hand, who has published an admirable work on the subject, maintains that the 'to-bedyawîyeh' language of the Bega ( $\mathrm{p} . \mathrm{xlv}$ ) is more likely to be cognate with that of the inscriptions, as he believes that the Blemmyes, the ancestors of the Bega, were the original inhabitants of the region in question, and were expelled by the handsome and intelligent 'Nuba' negroes from the district to the S . of Kordofân. Friedrich Müller places the Nuba tongue in a separate category along with the dialects of a few other tribes in different parts of Africa, and there is certainly much to be said in favour of this distinction of it from the languages of the Hamitic races on the one side and the typical negro races on the other

Those Berbers who do not learn Arabic grammatically never speak it thoroughly well; but itis generally, though imperfectly, understood in Nubia. The traveller must therefore not expect to learn good Arabic from his Nubian servants. In their native country they till the banks of the Nile, but their land is of very limited extent and poorly cultivated; and as their harvests are scanty they are rarely able to support large families. They accordingly often emigrate at an early age to the
richer lowlands, chiefly to the large towns, and particularly to Alexandria, in quest of employment; and they find no difficulty in attaining their object, for they are generally active, intelligent, and honest, while the older immigrants, who are strongly attached to their country, are always zealous in procuring them work and rendering them assistance. When the Berber has succeeded in amassing a moderate fortune, he returns to settle in his native country, of which throughout his whole career he never entirely loses sight, and to which he frequently remits his hardly earned savings for the benefit of his relations. The cold winter nights in Egypt are very trying to the poor Berbers, who often have to sleep in the open air outside the doors, and many of them are attacked by consumption. They are most commonly employed as doorkeepers (bawwâb), as house-servants (chaddâm), as grooms and runners (sâis), for which their swiftness renders them unrivalled, as coachmen ('arbagi), and as cooks ( tabbâlch). Each of these five classes is admirably organised as a kind of guild, with a shêkh of its own, who levies a tax from each member, and guarantees the character and abilities of members when hired. Thefts are very rarely committed by the Nubians, but in cases of the kind the shêkh compels the whole of his subjects to contribute to repair the loss, and cases have been known in which several hundred pounds have been recovered in this way. The result is that there is a strict mutual system of supervision, and suspected characters are unceremoniously excluded from the fraternity. Nubian women are seldom seen in Egypt.
(6.) Negross. Like the Berbers, most of the negroes in Egypt are professors of El-Islâm, to the easily intelligible doctrines of which they readily and zealously attach themselves. Most of the older negroes and negresses with whom the traveller meets have originally been brought to Egypt as slaves, and belong to natives, by whom they are treated more like members of the family than like servants. Although every slave who desires to be emancipated may now with the aid of government sever the ties which bind him to his master, most of the negroes prefer to remain on the old footing with the family which supports them and relieves them of the anxiety of providing for themselves. The eunuchs, who also belong almost exclusively to the negro races, but are rapidly becoming rarer, very seldom avail themselves of this opportunity of regaining their liberty, as their emancipation would necessarily terminate the life of ease and luxury in which they delight. The slave-trade is now very rapidly approaching complete extinction in Egypt, not so much owing to the penalties imposed (which the rapacious officials take every opportunity of enforcing), as from changes in the mode of living, and the growing preference of the wealthy for paid servants.

The negroes, who voluntarily settle in Egypt in considerable numbers, form the dregs of the people and are employed in the mos ${ }_{t}$ menial offices. Most of the negro races of Central Africa to the N .
of the equator are represented at Cairo, particularly in the rank and file of the negro regiments.

Ethnographers, lingaists, or other scientific men who desire to see specimens of as many different races as possible should obtain an introduction to an Arabian merchant in the Gamelîyeh, who will conduct them to merchants from every part of the interior and of the African coast, each attended by his staff of negro servants. The latter, however, especially if long resident in Egypt, cannot give trustworthy information about their country and their origin. Some of them have forgotten their mother tongue and even the name of their native conntry.

Foreigners are prohibited from taking negro servants out of the country, bnt if through the intervention of their consul they obtain permission they must find security for their subsequent restoration.
(7). Turks. Although the dynasty of the viceroys of Egypt is of Turkish origin (see p.cxxviii), a comparatively small section of the community belongs to that nation, and their numbers appear to be diminishing. The Turks of Egypt are chiefly to be found in the towns, where most of them are government officials, soldiers, and merchants. The Turkish officials are much to blame for the maladministration which so long paralysed the rich productiveness of the valley of the Nile, having always with few exceptions been actuated in their proceedings by motives of reckless cupidity without regard to ulterior consequences. The Turkish merchants are generally a prosperous class, and, although fully alive to their pecuniary interests, they are dignified and courteous in their bearing, and are often remarkable for the handsomeness of their features.
(8). Levantines. A link between the various classes of dwellers in Egypt and the visitors to the banks of the Nile is formed by the members of the various Mediterranean races, known as Levantines, who have been settled here for several generations, and form no inconsiderable element in the population of the larger towns. Most of them profess the Latin form of Christianity, and Arabic has now become their mother tongue, although they still speak their old national dialects. They are apt linguists, learning the European languages with great rapidity, and good men of business, and owing to these qualities they are often employed as shopmen and clerks. Their services have also become indispensable at the consulates as translators of documents destined for the native authorities, and as bearers of communications between the respective offices. A large proportion of them are wealthy. Being Christians, the Levantines all live under the protection of the different consuls, and thus unfairly escape payment of taxes, although they derive the whole of their wealth from the country.
(9). Armbilans and Jews. This section of the community is about as numerous as the last, and in some respects contrasts favourably with it. The Armenians generally possess excellent abilities, and a singular aptitude for learning both Oriental and European languages, which they often acquire with great grammatical accuracy. Many of them are wealthy goldsmiths and jewellers, and they often hold important government offices.

The Jews are often distinguishable by their red hair from the native Egyptians, as well as by other characteristics. Most of them are from Palestine, but many have recently immigrated from Wallachia. All the money-changers in the streets ( $s a r r \hat{f} f$ ), and many of the wealthiest merchants of Egypt, are Jews, and notwithstanding the popular prejudice entertained against them, owing as is alleged to their disregard of cleanliness, they now form one of the most highly respected sections of the community.
(10). Europeans. The number of European residents and visitors in Egypt at the census of 1882 was 82,000, exclusive of the British army of occupation. The Greeks are most numerously represented, then the Italians, French, English (including Maltese), Austrians (including many Dalmatians), and Germans. The numerous Swiss residents in Egypt, who are not represented by a consul of their own, are distributed among the above leading classes (French, Italian, German). Beside these nationalities, there are also a few representatives of Russia, America, Belgium, Scandinavia, and other countries. Each of the above leading nationalities shows a preference for one or more particular occupations, in which they sometimes enjoy a complete monopoly. The Greeks of all classes are generally traders. They constitute the aristocracy of Alexandria, and the victual-dealers (bakkal) in all the other towns are mostly Greeks. They are the proprietors of the numerous small banks which lend money on good security, both to the peasantry and the government officials, at a rate of interest sometimes amounting to 6 per cent monthly, the maximum permitted by law; and they are the only Europeans who have established themselves permanently as merchants beyond the confines of Egypt proper. The Greeks also have the unenviable notoriety of committing numerous murders, thefts, and other crimes, but it must be borne in mind that they are by far the most numerous section of the European community ( 35,000 from Greece alone, besides many Turkish subjects), and that some 30,000 of them belong to the lowest class of emigrants from an unhappy and ill-conditioned country. Many of these crimes must, moreover, be regarded as the outcome of the sadly misdirected daring and ability which characterise their nation. The superiority of the Greeks to the Orientals is nowhere so strikingly manifested as in Egypt, where it affords a modern reflex of their ancient, world-renowned supremacy. Most of them are immigrants from the various Greek islands, and the purity of their type is specially noteworthy.

The Italian residents, 16,000 in number, consist chiefly of traders of a humble class, advocates, and musicians, from the operatic singer down to the Calabrian itinerant. Of French nationality $(15,000)$ are all the artizans of the higher class, who are generally noted for their skill, trustworthiness, and sobriety, and indeed form the most respectable stratum of the European community.

Most of the better shops are kept by Frenchmen, and the chief European officials of the government, including several architects and engineers, are French. The English settlers number about 5000 , exelusive of the troops, of which there were about 3500 at the beginning of 1894. Until recently their specialities were the manufacture of machinery and the construction of railways and harbours ; but of late they have also almost monopolised the chief posts in those branches of the administration (post and telegraph office, railways, custom-house) that have been remodelled after the European pattern. A large majority of the residents who enjoy the protection of the British consulate are Maltese, and to them apply even more forcibly most of the remarks already made regarding the Greeks. It has been ascertained that the Maltese settlers in foreign countries are more numerous than those resident in their two small native islands, and of these a considerable proportion belongs to Egypt. At home, under the discipline of British institutions, they form a pattern little nation of their 0wn, but in Egypt, where they are freed from the restraint of these influences, they are very apt to degenerate and to swell unduly the ranks of the criminal class. Many of the Maltese, however, are enterprising tradesmen and industrious artizans, such as shoemakers and joiners. To the Austrian (3000) and German (1000) community belong a number of merchants of the best class, many physicians and teachers, innkeepers, musicians, and lastly handicraftsmen of humble pretensions.

With regard to the capability of Europeans of becoming acclimatised in Egypt, there are a number of widely divergent opinions. Much, of course, must depend on the nature of the climate of their own respective countries. It has been asserted that European families settled in Egypt die out in the second or third generation, but of this there is no sufficient proof, as the European community is of very recent origin, and many examples to the contrary might be cited. The climate of Egypt is less enervating than that of most other hot countries, an advantage attributed to the dryness of the air and the saline particles contained in it; while the range of temperature between the different seasons is greater than in Ireland or Portugal.
e. The Nile (comp. Map, p. xxxii). The Nile ranks with the Amazon and the Congo as one of the three longest rivers in the world (about 4000 miles), since its headstream was proved by Dr. O. Baumann in 1892 to be the Kagera, which rises three degrees to the $\mathbf{S}$. of the Equator. Throughout nearly the whole of its course the river is navigable, with two great interruptions only (at Abu HammedBarkal and Donkola-Wadi Halfa). Though it is greatly surpassed by the Amazon and Cougo in volume, neither these nor any other river in the world can vie in historical and ethnographical interest with the 'father of rivers'.

The discovery of the true sources of the Nile and the cause of its annual overflow are two scientific problems which for upwards of 2000 years European scholars laboured to solve, while the Egyptians themselves regarded the river as a deity, and its origin and properties as the most sacred of mysteries, to be revealed to the cnrious spirit of man only when he should have quitted this earthly scene. As it is the Egyptian Nile only with which we have at present to deal, we shall advert but briefly to the subject of the sources of the river, and mention the principal affluents only which affect Egypt.

The Nile is formed by the confluence of the White and the Blue Nile at the town of Khartûm, from which point to its principal mouths at Damietta and Rosetta, a distance of upwards of 1800 miles, it traverses an absolutely barren country, and receives one tributary only, the Atbara, on the east side, about 180 miles below Khartûm. Throughout the whole of this distance, in the course of which it falls 1240 ft ., the river has to contend against numerous absorbing influences, for which it receives no compensation beyond the rare showers attracted in winter by the mountains between its right bank and the Red Sea. Nothwithstanding the immense length of the river, it very rarely presents the picturesque appearance of some of the great European and other rivers, as its banks are generally flat and monotonous, and it contains hardly a single island worthy of mention. The broadest parts of this portion of the Nile are a little below Kharṭûm, a little above its bifurcation near Cairo, and also near Minyeh, at each of which places it attains a width of about 1100 yds ., while the White Nile is of greater breadth throughout a long part of its lower course. As the river pursues its tortuous course through thirsty land, for a distance of 15 degrees of latitude, much of its wateris consumed by evaporation and infiltration (a process by which it is probable that the Libyan oases are supplied with water from the Nubian Nile), and still more so by the extensive system of artificial canals requisite for the irrigation of a whole kingdom. M. Linant estimates this loss at the time of the inundation within Egypt proper, i.e. between Gebel Selseleh and Cairo, as one-third of the total volume; he found that $1,093,340,222 \mathrm{cu}-$ bic mètres of water passed Gebel Selseleh in 24 hrs ., while on the same day only $705,588,389$ cubic mètres passed Cairo. At the confluence of the White and Blue Nile their average volumes are in the proportion of three to one, but the latter assumes far greater importance when swollen by the Abyssinian rains. The Blue Nile is in fact a species of mountain-torrent, being liable to rise suddenly and sweep away everything it encounters on its rapidly descending course. It is therefore called the Bahr el-Azrak, i.e. the blue, 'dark', or 'turbid', in contradistinction to the Bahr el-Abyad, i.e. the white, or rather the 'clear' river, whose water descends from clear lakes and is farther filtered by the vast grassy
plains and occasional floating plants through which it passes. The Blue Nile (together with its coadjutor the Atbara) may therefore be regarded as the sole origin of the fertility of Egypt, and also as the cause of the inundation, while on the other hand the regular and steady supply of water afforded by the White Nile performs the very important office of preventing the lower part of the river from drying up altogether in summer. The White Nile is not only much larger than the Blue in average volume, but is, with its tributaries, morethan double the length. It does not, however, remain very long undivided. Higher $u_{p}$, in $9^{\circ}$ N. latitude, it receives on the east side the waters of the $S O b \hat{a} t$, a stream descending from the mountains to the south of Abyssinia, and resembling the Blue Nile in character, though much smaller. A little farther up, on the opposite side, the White Nile is joined by the Bahr el-Ghazall, or Gazelle River, a very sluggish stream, fed by numerous springs rising in the Nyamnyam and Kredy regions, between $4^{\circ}$ and $5^{\circ} \mathrm{N}$. latitude. Higher up the river takes the name of Bahr el-Gebel, and is considerably smaller in volume, and beyond $5^{\circ} \mathrm{N}$. latitude it ceases to be navigable, as it descends in a series of rapids from the Albert Nyanza or Mwutan Lake. This sheet of water is connected by another river, the 'Somerset' or Victoria Nile, which may be regarded as the continuation of the White Nile, with the Victoria Nyanza or Ukerewe Lake; while the Kagera or Alexandra Nile and other feeders of the latter may be called the ultimate sources of the Nile.

The Valley of the Nile from Khartûm to the Delta, although from its great length ( $15^{\circ}$ of latitude) necessarily possessing great varieties of climate, forms one long unbroken tract of country, the fertilising soil of which is brought down by the Blue Nile from the Abyssinian mountains.

The breadth of the Valley of the Nile, including the barren land immediately flanking it, varies from $41 / 2$ to 10 miles in Nubia, and from 14 to 32 miles in Egypt. The banks, of which the eastern is called the 'Arabian', and the western the 'Libyan', rise at places to upwards of 1000 ft ., resembling two large canal embankments, between which the river has forced its passage through the plateau of 'Nubian sandstone' (which extends to the Gebel Selseleh above Edfu), and through the nummulite limestone of Upper and Central Egypt. The breadth of the cultivable alluvial soil corresponds with the above varying width, but nowhere exceeds 9 miles. The soil deposited by the Nile averages $33-38 \mathrm{ft}$. deep in Egypt, but near Kalyûb at the head of the Delta it increases to about 50 ft ., the bottom of it being at places below the level of the sea. The bed of the river is also of considerable depth, and at low water the mudbanks (gef) rise above its surface to a height of 25 ft . in Upper Egypt, and 14 ft . at Cairo. These are also the depths of the various irrigation wells.

The Nile soil is unlike any other in the world in its composition. According to Regnault it contains. 63 ner cent of water and sand, 18 per
cent of carbonate of lime, 9 per cent of quartz, silica, felspar, hornblende, and epidote, 6 per cent of oxide of iron, and 4 per cent of carbonate of magnesia.

Nothing certain is known regarding the average increase of the alluvial land, all the calculations regarding it having hitherto been based on erroneous or insufficient data. Thus the Nilometer of antiquity furnishes the depth relatively to the level of the sea, but not absolutely. The thickness of earth accumulated around buildings of known age has also been found a fallacious guide; and lastly local measurements lead to no result, as the river often capriciously washes away what it has deposited in previous years. An approximate calculation might possibly be made if the proportion of solid matter annually brought down by the river could be ascertained, but no investigation of this kind has ever been made. It has sometimes been asserted that the desert has begun to encroach upon the cultivated part of the valley, but Sir G. Wilkinson has shown, that, while the sand of the desert may be advancing at places, the cultivable bed of the valley is steadily increasing in thickness and width.

The Inundation, as is obvious from what has already been said, is more or less favourable according to the greater or less amount of rain that falls among the Abyssinian mountains, for that which falls in Central Africa is a more constant quantity, being regulated by the influence of the trade-winds. Like the waterspouts which descend on equatorial Africa, the overflow always recurs at the same season of the year, varying in its advent by a few days only, and in its depth by several yards. At the beginning of June the river slowly begins to swell, and between the 15 th and 20 th of July the increase becomes very rapid. Towards the end of September the water ceases to rise, remaining at the same height for a fortnight or more, but during the first half of October it rises again and attains its highest level (comp. p. ciii). After having begun to subside, it generally rises again for a short time, sometimes regaining and even passing its first culminating point. At length it begins to subside steadily, and after a time the decrease becomes more and more rapid. In January, February, and March the flelds from which the water has receded gradually dry up, and in April, May, and the first few days of June the river is at its lowest. The height of the inundation most favourable for agriculture at the present day has been ascertained by long observation to be 23 cubits 2 inches (i.e. about 41 ft . 2 in ., the cubit being 21.386 inches), while in the time of Herodotus 16 cubits sufficed, and the god of the Nile in the Vatican is therefore represented as surrounded by sixteen children. A single cubit more is apt to cause terrible devastation in the Delta, and elsewhere to cover many fields destined for the autumn crop (nabâri, p.lxxiii), while a deflciency of two cubits causes drought and famine in Upper Egypt. As health depends to a great extent on the regularity of the pulsations of the heart, so the welfare of the whole of this singular
country is jeopardised by a too powerful or a too scanty flow of the great artery on which its very existence depends. An excessive overflow, especially if it does not give notice of its approach in due time, is far more disastrous now than formerly, as the extensive cotton-fields in the Delta will not bear flooding, and have to be protected by embankments.

Egypt is now no longer a vast lake during the inundation as it formerly was, nor does the overflow of the fields take place in a direct manner as is commonly supposed. The water is conducted into a vast network of reservoirs and canals, and distributed as required (comp. p. lxxi), and special engineers are appointed for their supervision. The whole of the cultivable land is divided into huge basins, in which the water introduced by the canals is maintained at a certain height until it has sufficiently saturated the soil and deposited the requisite quantity of mud. After the water in the river has subsided, that in the basins may either be discharged into the river or into the canals, or it may be used for filling other basins lying at a lower level. During these operations many of the villages are connected by means of embankments only, while others can only be reached by boat, and the whole country presents a very peculiar and picturesque appearance.

If the river and the system of canals connected with it are in any way neglected, the consequences are very disastrous, as was notably the case during the latter part of the Byzantine supremacy and under the disgraceful sway of the Mamelukes, when the fertile soil of Egypt yielded less than one-half of its average produce. The mean difference between the highest and the lowest state of the river is about 25 ft . at Cairo, 38 ft . at Thebes, and 49 ft . at Assuân. Even in March and April the traveller will have an opportunity of observing how powerful and rapid the flow of the river still is, although its fall from Assuân (by the first cataract) to Cairo is 299 ft . only, or about seven inches per mile. The rapidity of the stream, however, which averages 3 miles an hour, is not so serious an impediment to the navigation as the frequent changes which take place in the formation of its channel, sometimes occasioning difficulties which the most careful of captains is unable to foresee.

If we now enquire what influence this remarkable river has exercised on the history of civilisation, we can hardly avoid the conclusion that it was the Nile, with its unique character, that stimulated the ancient Egyptians to those great physical and intellectual exertions which rendered them the most famous and the most civilised among the nations of antiquity. The necessity of controlling its course and utilising its water taught them the art of river-engineering and the kindred science of land-surveying, while in the starry heavens they beheld the eternal calendar which regulated the approach and the departure of the inundation, so that the river may perhaps have given the first impulse to the study of
astronomy. As the annual overflow of the water obliterated all landmarks, it was necessary annually to measure the land anew, and to keep a register of the area belonging to each proprietor ; and above all it became an important duty of the rulers of the people to impress them with a strong sense of the sacredness of property. Every succeeding year, however, there arose new disputes, and these showed the necessity of establishing settled laws and enforcing judicial decisions. The Nile thus led to the foundation of social, legal, and political order, and it is also natural that the mighty and mysterious river on which the welfare of the entire population depended should have awakened their religious sentiment at a very early period. Subsequently, when the engineers and architects, in the service of the state or in the cause of religion, erected those colossal structures with which we are about to become acquainted, it was the Nile which materially facilitated the transport of their materials, and enabled the builders of the pyramids and the other ancient Egyptians to employ the granite of Assuân for the structures of Memphis, and even for those of Tanis, on the coast of the Mediterranean. As the river, moreover, not only afforded a convenient route for the transport of these building-materials, but also an admirable commercial highway, we find that the Egyptians had acquired considerable skill at a very early period in constructing vessels with oars, masts, sails, and even cabins and other appliances.

From the earliest historical period down to the present time the course of the Nile, from the cataracts down to its bifurcation to the north of Cairo (the ancient Kerkasoros, i.e. the mutilation of Osiris), has undergone very little change. This, however, is not the case with its Embodchures; for, while ancient writers mention seven (the Pelusiac, the Tanitic, the Mendesian, the Bncolic or Phatnitic, the Sebennytic, the Bolbitinic, and the Canopic), there are now practically two channels only through which the river is discharged into the sea. These are the mouths at Rosetta (Reshîd) and Damietta (Dumyât), situated near the middle of the Delta, while the Pelusiac and Canopic mouths, the most important in ancient times, lay at. the extreme east and west ends of the coast respectively. The water was afterwards gradually compelled to seek other outlets. The Pelusiac arm found a convenient exit through the Phatnitic near Damietta, while the Canopic was artificially conducted into the Bolbitinic. All the principal arms of ancient times at length entirely disappeared, combining to form the modern outlets. These last will in their turn be abandoned, as the river will doubtless again force for itself a more direct passage with a greater fall.
f. Geological Notice. (1) Egypt Profer. There is no exaggeration in the often repeated saying that Egypt is 'the gift of the Nile'. But for the bounties dispensed by the river, what is now the most fertile country in N. Africa would be a wilderness of bare rock or sand. With the greatest height attained by the inundation and the extreme length of the irrigation canals corresponds precisely the line which divides the Sahara from the cultivated land. The whole of the alluvial soil deposited by the Nile is an entirely foreign element in the geological structure of N. Africa, and its geological character is uniform and easily determined.

The origin, composition, and thickness of the alluvium has already been stated. The perpendicular, black, and furrowed mud-banks, which often rise to a height of $25-35 \mathrm{ft}$., are composed of distinct parallel strata of somewhat different colours, with thin layers of sand occasionally in-
tervening. In Lower Egypt the mud is rather more thinly spread over the whole Delta, in the form of a blackish or reddish-brown laminated mass, a few isolated spots ouly remaining uncovered.

Wherever the ground is denuded of its allavium, apart from which there is no permanent soil in Egypt, it is absolutely sterile; for in this hot and dry country there is no winter, with its protecting mantle of snow, to retard the decomposition of vegetable matter, and to promote its admixture with disintegrated rock, so as to form fertile soil. Owing to the want of vegetation and moisture, without which the progress of disiategration is reduced to a minimum, the surface of the naked rock in Egypt and the neighbouriag deserts retains its character almost unaltered. The hage masses of debris observed at the foot of the rocks in the valley of the Nile, and particularly at the mouths of the wâdies, and the curious isolated hills with which every traveller through the desert is struck, could not possibly have been formed during the present state of the Egyptian climate. They prove that at some pre-historic period the now parched and sterile ground must have been overflowed by copious volumes of water which produced these and various other effects on the appearauce of the earth's surface.

The geologist will find little to attract his attention in the alluvial soil of Egypt; but on the sea-coast, and in that part of the isthmus which is intersected by the caual, there are several points of interest.

On entering the harbour of Alexaudria the traveller will observe the massive blocks of stoue from the quarries of Meks of which the quays are constructed. They coasist of recent tertiary, light-coloured, sandy limestone, composed chiefly of ianumerable broken fragments of conchylia, a kind of rock which extends far to the $W$. of Alexandria, and probably constitutes the greater part of the lofty Cyrenæan plaia. This rock forms the building-stoue generally used at Alexandria, and is also employed in the harbour-structures of Port $\mathrm{Sa}^{\prime} \mathrm{id}$.

Amidst the desert sand of the isthmus, which even in Lower Egypt forms a substratum uuderlying the Nile mud, and which in the E. part of the desert is nearly covered with a solid gypseous and saline crust, the rock occasionally crops up, or has been uncovered in the course of the excavation of the caual. Near the Shalûf station (p. 196) a greenish-grey, gypseous marl overlies the solid limestone, which contains the tertiary mariue conchylia, sharks' teeth, and remains of crocodiles and amphibious mammalia. The same formation occurs in other places also, and ridges of the early tertiary nummalite limestone likewise occasionally rise from the plain. At several poiats on the coast of the Red Sea, particularly near Kosêr, at a height of $600-950 \mathrm{ft}$. above the sea-level, we find rock of the late tertiary or diluvial era contaiaing coral, which shows how much the land must have risen since that period. With these coral-reefs the petroleum wells of Gebel ez-Zêt and the sulphur which occurs on the Râs el-Gimsâh appear to be closely connected.

To the miocene, or middle tertiary period, beloug several isolated deposits of sandstone oear Cairo, in which are found the beautiful fossil sea-urchins (Clypeaster Aegyptiacus) frequently offered for sale near the Pyramids. The place where they occur, on the margin of the desert, about 2 MI . to the S . of the Sphiox, has been visited and described by Prof. Fraas.

One of the priacipal geological curiosities near Cairo is the Petrified Forest (comp. p. 132). About 5 M. to the E. of the town begins the Khashab ('wood') desert, the surface of which for many miles is sprinkled with whole tranks and fragments of silicified wood. Few travellers go beyond the 'small' petrified wood; the 'great' lies about 20 M . to the E. of Cairo. 'The desert here is so completely covered with trunks, that, except the fine sand itself, no other kiud of stone is visible than the flint into which the Nicoliae have been coaverted'. (Fraas.) Trunks of $60-90 \mathrm{ft}$. in leagth and 3 ft . in thickuess have sometimes been found. These have been described by Unger as Nicolia Aegyptiaca (of the family of the Sterculiaceae), but, according to more recent investigations, it would seem that the forest contained various other trees also (palms and
dicotyledonous plants). Whether the trnnks have grown and been silicified on the spot, or were brought here by innndations from the south, is still an open question. At all events these remarkable deposits date from the late tertiary period.

Above Cairo, to the S., the Nile is flanked by ranges of hills, the valley between which is generally $4-9 \mathrm{M}$. in width. On the east side of the Nile begins the Arabian, and on the west side the Libyan desert, both of which are very inhospitable, being ill provided with water, and covered at places only with scanty vegetation. From the northernmost spur of the Arabian desert (the Mokattam near Cairo) to a point above Edfu, both banks of the Nile consist of early tertiary nummulite limestone. The strata dip gradually from south to north, so that the farther we ascend the Nile the older are the strata that we meet with. The limestone of the Mokattam, with its millions of nummulites, is the material of which the new buildings of the European subnrbs of Cairo are constructed, and it was from the venerable quarries of Tura and Marsara that the ancient Egyptians obtained the stone for their pyramids. The blocks for these stupendous strnctures were conveyed to them by means of a huge stone dyke, of which all trace has now disappeared. On the Mokattam, near Minyeh, Beni Hasan, Siût, Thebes, Esneh, and at other piaces the limestone is rich in fossils, and in the vicinity of Cairo geologists can easily form a considerable collection of them. The quarrymen on the Mokattam offer visitors fossil crabs (Xanthopsis PaulinoWürtembergicus) and sharks' teeth for a moderate bakhshîsh.

To the south of Edfu the nummulite limestone disappears, being replaced by marl and rocks of calcareous and sandy character, which, according to Figari-Bey, contain chalk fossils. After these we come to quartzose sandstone, belonging to the middle chalk formation, and forming considerable cliffs at the Gebel Selseleh, which confine the river within a narrow bed.

This last formation, known as 'Nubian sandstone', which covers many thousands of square miles of Nubia and the Sûdân, was the material almost exclasively ased for the construction of the ancient temples of Upper Egypt; and near Selseleh, and in the Arabian desert between Keneh and Kosêr, are still to be seen the extensive quarries which yielded the material for the colossal strnctures of Thebes.

From Assuân to Selseleh the Nile flows through Nubian sandstone, but near the ancient Syene a transverse barrier of granite and 'syenite' advances from the east, forming the boundary between Egypt and Nubia. This barrier extends eastwards for about 180 miles, forming a very irregular chain of barren hills $900-1300 \mathrm{ft}$. in height.

The Nile has forced a passage for itself through this hard rock, exposing to view at places the beautiful red felspar crystals which it contains, and forms a wild cataract at Assuân. Near the cataracts are the deserted quarries of the ancient Egyptians, where to this day we still observe a number of unfinished gigantic obelisks, and columns half hewn out of the solid rock.
(2) The Arabian Desert. Parallel with the coast of the Red Sea, a broad and massive range of monntains, consisting of crystalline rocks (granite, syenite, diorite, porphyry, hornblende slate, gneiss, mica-slate, etc.), rnns through the Arabian Desert, sending forth numerons ramifications into the interior of the country. At Hammâmât, on the caravanroute from Koṣèr to Thebes, we pass the quarries whence the darkcoloured stone (aphanite, diorite, and verde antico) used for the ancient sarcophagi and sphinxes was obtained by the Egyptian sculptors. Near the Red Sea, almost opposite the southern extremity of the peninsula of Sinai, rises the Gebel Dukhân, which yielded the beautiful red porphyry (porfido rosso) so highly prized by the Greeks and Romans at a later period, and used by them for vases, columns, sarcophagi, busts. and mosaics. The granite qnarries of the Gebel Fatîreh yielded both building stone and copper. Most celebrated of all, however, were the emerald mines of the Gebel Zebâra, situated on the Red Sea in the latitnde of Selseleh.

This extensive range of mountains of crystalline formation, rising to
a height of 6600 ft ., of which those of the peninsula of Sinai form a counterpart, terminates towards the east in roof-shaped, stratified formations. At first there occurs a considerable stratum of Nubian sandstone, next to which we find a series of clayey and calcareous strata, identified by Figari-Bey with the Triassic and Jura formations, probably erroneously, as the collection of specimens of the rock at Florence shows that apparently the chalk alone is completely developed. These strata are succeeded by extensive masses of limestone, belonging to the nummulite formation, and stretching to the Nile. Among these last formations is found the pale yellow, brownish, and snow-white alabaster, a kind of limestone composed of nodulous masses, which was formerly quarried at the ancient Alabastron near Siût, and still occurs on the Gebel Urakam near Beni-Saêf. In the reign of Mohammed 'Ali this alabaster was largely used in the construction of his alabaster mosque (p. 54), and it was extensively exported in ancient times for the ernbellishment of buildings and for sculptural purposes. Blocks of it are even found among the ruins of the Oasis of Ammon.

These extensive mountains, with their nnmerous profound ravines and boldly shaped masses of rock, impart a most imposing character to the Arabian Desert. This region is by no means so destitute of vegetation as is usually supposed; for, although without oases, it contains, particularly in the N. part, a number of springs and natural cisterns, which are filled by the rare, but often copious, rains of winter.
(3). The Libyan Desert. This region again presents an entirely different character. It consists of an immense, monotonous, and stony tableland, $650-1000 \mathrm{ft}$. above the level of the Nile, extending between the Nile and the oases of Khârgeh, Dâkhel, Farâfra, and Bahrîyeh. Throughout this vast area there occur neither mountains, nor valleys, nor even isolated hills of any considerable height; and there is no trace of crystalline or volcanic formations. The surface of the desert rises in gradations, each preceded by a broad girdle of isolated mounds, which have been obviously formed by erosion, the materials having been washed down from the adjoining plateau. The whole of this stony and absolutely onwatered plain, the monotony of which is only varied by a few solitary ranges of sand-hills, consists of nummulite limestone. In the direction of the oases it descends in precipitous slopes, furrowed with numerous ravines, and occasionally nearly 1000 ft . in height. The different strata of the earlier nummalite formation, as well as those of the upper chalk, are here exposed to view, and generally contain numerons fossils. The oases, particularly those of Dâkhel and Khârgeh, are remarkable for their fossil wealth. The soil of the deep depressions in which these oases lie, partly below the level of the Nile, consists of the variegated clayey or sandy strata of the apper chalk. The ground is so strongly impregnated with alum at places that it was thought worth while about thirty years ago to erect manufactories for its preparation, but the undertaking was afterwards abandoned owing to the difficulties of transport. Numerous thermal spriugs well up from the apper strata of the chalk, and the soil thus irrigated is luxuriantly clothed with vegetation (see p. lxiii).

The barrier of Nubian sandstone which abuts on the valley of the Nile at Selseleh extends far iuto the Libyan desert. It forms the southwestern boundary of the oases of Khârgeh and Dâkhel, beyond which it stretches for an unknown distance into the heart of the desert. This formation contains silicified wood and iron and manganese ores in abundance.

About six days' journey to the $\mathbf{W}$. of the oases begins a complete ocean of sand. As far as the eye can reach we discover nothing but a vast expanse of loose yellow sand, which generally forms itself into ranges of saud-hills, many miles in length, and occasionally rising to a height of 300 ft . or apwards above the level of the plain.

The oasis of Farâfra lies in a recess eroded in the nummulite limestone, and enclosed by precipitous slopes, except on the S. side where there is an opening. To the $N$. and $W$. of Farâfra extends the eocene limestone plateau as far as the neighbourhood of Siwa, between which oasis and Bahrîyeh it is remarkable for its numerous basin-shaped
and sharply defined depressions. These basins, especially those which are filled with salt-lakes, impart a peculiarly attractive character to the scenery. The whole of the desert around the Oasis of Ammon consists of recent tertiary deposits, the fossil wealth of which was once extolled by Herodotus and Eratosthenes.

Approximately speaking, the Libyan Desert consists of Nubian sandstone, the upper chalk, the nummulite limestone, and the more recent tertiary formations, arranged in this sequence, and extending in broad successive strips from S.S.E. to N.N.W.
g. The Oases (by Prof. P. Ascherson; see also Baedeker's Upper Egypt). In the midst of the Libyan Desert, the most bleak and desolate part of the whole of the African Sahara, at a distance of several days' journey to the $W$. of the Nile, there have existed since hoar antiquity a number of highly favoured spots, which are abundantly irrigated by subterranean supplies of water, and richly covered with vegetation almost vying in luxuriance with that of the valley of the Nile. The Coptic word 'Wâh', according to Brugsch, is of ancient Egyptian origin, and signifies an inhabited station; in its Greek form 'oasis' (properly Oúagıs or Aüaoıs), the word is used as the geographical term for irrigated and cultivable spots, or islands of vegetation, in the midst of the stony and sandy ocean of the desert.

Four of the five Egyptian oases lie in a somewhat curved line drawn from S.E. to N.W., and converging at the S. end to the valley of the Nile: - (1) Wah el-Khargeh, i.e. 'the outer oasis' (already so named by Olympiodoros in the 5th cent. A.D.), or Oasis Major of antiquity, situated 3-4 days' journey from Thebes or from Girgeh on the Nile. (2) Wâh ed-Däkhelìyeh, or more commonly Dâkhel, i.e. the 'inner oasis' (also so named by Olympiodorus), 3 days' journey to the W. of Khargeh, and about 6 days' journey from the valley of the Nile near Siût. (3) Far'afra (i.e. the bubbling springs), about 5 days' journey to the N.N.W. of Dâkhel, and 8-10 days' journey from the valley of the Nile near Siût. (4) Siwa, anciently the celebrated oasis of Jupiter Ammon, 16 days' journey to the W.S.W. of Alexandria and about 14 from Cairo. The direct route from Sîwa to Farâfra (traversed by Rohlfs and Zittel in 1874 in $101 / 2$ days) is little known as yet, as most Earopean travellers make the long circuit towards the E. viâ - (5) Wah el-Bahrîyeh, i.e. 'the northern oasis', or Oasis Minor of antiquity, situated $51 / 2$ days' journey to the S.W. of Medinet elFaŷ̂m, about 4 days' journey from Behneseh in the valley of the Nile, 9 days from Sîwa, and 5 days from Farâfra.

The oases always lie at a considerably lower level than the stony platean of the desert, which rises above them in picturesque rocky precipices, and the oasis of Sîwa is about 78 ft . below the sea-level. The flat surfaces of these depressions do not always form a single cultivated area, but consist, even in the case of the smallest oases like Farâfra, of a number of comparatively small parcels of cultivable soil, separated by belts of sterile groand. One of the large oases, like that of Khârgeh, when surveyed from the neighbouring heights, presents the appearance of a large expanse of desert, flecked with isolated spots of light and dark green, the former being fields of corn and other crops, and the latter palm-groves. These islands of vegetation, the extent of which depends on the copionsness of the springs in their midst and the amount of care used in the distribution of the water, have often since the time of Strabo been not inaptly compared to the spots on a panther's skin, but the simile applies to the oases individually, and not to those of the Libyan desert as a whole, as they are but few in number and very far apart.

As already observed, these Libyan oases owe their fertility to the copiousness of their water supply. Inexhaustible subterranean channels, or an immense reservoir, perhaps common to all the oases, are believed to connect them with the Nubian Nile, or possibly with the Sûdân; and of this supply it is probable that a very limited portion only comes to the surface in the form of springs. Hasan-Effendi, a well-digger from the valley

## THE OASES.

of the Nile, and formerly servant to a French engineer, has sunk about sixty new wells in the oasis of Dâkhel, some of which, though close to older wells, do not seem to diminish the copiousness of the latter. With the aid of this, additional supply a large area of sterile soil has been brought under cultivation, and it is therefore probable that by means of Artesian wells, such as those sunk by the French in the Algerian oases, the extent of the cultivable soil might still be largely increased. The high temperature of the water, both in the natural springs and in the wells, shows that it comes from a great depth; and it is strongly impregnated with mineral ingredients, as in the case of the bath-springs of Kassr Dâkhel and Bahrîyeh ( $97^{\circ}$ Fahr.), and the beautiful sun-spring ('Ain Hammâm) at Sîwa ( $85^{\circ}$ ), the curative properties of which, owing to their remote situation, are seldom atilised. At Bahriyeh the stratum from which the water more immediately bursts forth seems to lie at no great depth below the surface of the soil. The thermal waters of Dâkhel contain iron, and, like those of Farâfra and Khârgeh, are not unpleasant to drink when cooled; but the water of Siwa is brackish and nauseous to the taste. The wells are generally very deep ( $90-320 \mathrm{ft}$. and upwards), and in ancient times the inhabitants of the oases, as we are informed by Olympiodorus, were celebrated for their skill in sinking them. The invasion of the Arabs, however, was succeeded by several centuries of barbarism, during which the art of boring wells was well-nigh forgotten; many wells were filled up, and extensive tracts of cultivated land, still traceable by the old divisions of the fields, were abandoned; but, as above mentioned, the practice is beginning to be revived. The considerable force with which the water comes up from its profound reservoirs enables the inhabitants to construct wells or artificial dams on the highest parts of the oases. The fields are always arranged in terraces of picturesque appearance, over which the fertilising element is conducted downwards in succession, so that the laborious system of sâkiyehs and shâdûfs used in the valley of the Nile is dispensed with. Among the southern oases, on the other hand, we frequently observe extensive water-conduits, carried by artificial embankments to long distances for the purpose of conveying the precions liquid over sterile salt ground to good soil, or necessitated by the requirements of the curiously involved rights of property. These conduits not unfrequently cross each other at different levels. The springs are generally the property of the communities, rarely that of wealthy individuals; and it is in proportion to their number, and that of the date-palms, that the inhahitants have to pay taxes, while the soil itself is nominally free. Where the springs are common property, the periodical distribution of the water has from time immemorial formed the subject of statatory regulations. The cultivable land consists of open fields and of gardens, which are carefully enclosed with earthen walls about 6 ft . high, erowned with twisted palm-leaves, for the purpose of keeping out intruders, or are more rarely hedged in with branches of the sunt or other thorny plant.

In the oases, as in the valley of the Nile, a regular rotation of winter and summer crops is observed (comp. p. lxxii), although, with their uniform supply of water, there is not the same necessity for it. The winter crops are wheat and barley; those of sommer are rice, dura (Sorghum vulgare), and a small proportion of dukhn (Penicillaria spicata), while in Dâkhel and Khârgeh indigo is grown in considerable quantities. Cotton is also cultivated to a small extent, but the yield is hardly adequate for even the local requirements. By far the most important fruit yielded by the gardens is that of the date-palm. The delicions dates are very superior to those of the Nile valley, and they form, particularly at Dâkhel and Siwa, the only important article of export. Olive-trees also occur in all the oases, especially in Farâfra, Bahrîyeh, and Sîwa, where they yield a considerable quantity of oil, besides which there are apricots, oranges, lemons, and melons, but very few other fruit trees. The ordinary vegetables grown in the valley of the Nile, such as lettuces, cabbages, and kalkâs, are never met with; nor have the recently introduced sugar-cane and the beautiful lebbek acacia ( p . lxxv) yet found their way to the oases. The venerable ṣunt-trees (p. lxxv) form a very
characteristic feature of the soathern oases. They generally shade the wells, or the sites of old wells now filled up owing to neglect, and they indicate the course of the water-conduits to the still distant traveller.

The most prominent of the indigenous plants of the oases is the 'oshr (Calotropis procera), which is also common on the banks of the Nile in Upper Egypt. It is a broad-leaved shrub or small tree, attaining a height of 6 ft . or more, with a copious milky and very poisonous sap, and round fruit of the size of a large apple containing woolly seeds, and known on the banks of the Dead Sea as the 'apple of Sodom'.

The indigenous animals of the oases are mach fewer in number than those of the valley of the Nile. The only large mammal that occurs is the gazelle, which is also found in the sterile parts of the Libyan desert. The only beasts of prey are several varieties of jackals (Arab. dîb) and foxes (Arab. tacleb). Among the latter is the pretty fenek, which is only half the size of the European fox, yellowish-grey in colour, and with ears longer than the breadth of the head. Hyenas seem to be unknown, except in Bahrîyeh. The timid ostrich rarely visits the Libyan oases.

The domestic animals kept by the inhabitants of the oases consist of a few horses, numerous donkeys of a small and weakly type, which will not bear comparison with their strong and active congeners of Alexandria and Cairo, and a few oxen, sheep, and goats. Buffaloes are also kept in Khârgeh and a few in Bahrîyeh. It is surprising how few camels are to be found in the oases, but it is said that the bite of a certain fly endangers their lives in summer. Turkeys and fowls are plentiful.

The population of the oases is not of a uniform character. According to Brugsch, the original inhabitants were Libyan (or Berber) tribes, but after the oases were annexed to Egypt many new settlers were introduced from the valley of the Nile and from Nubia. The Berber nationality of the inhabitants of the oasis of Ammon, notwithstanding its having been connected with Egypt for several thousand years and its reception of immigrants from the west in the middle ages, is still very marked, while the popalation of the other oases, like that of the Nile valley, has adopted the Arabic language. In Bahriyeh (where, besides the natives of the place, there is a colony of Sîwanese who still speak the Berber dialect) and Farâfra the physiognomic type of the Berber race still predominates; in Dâkhel the features of most of the population are not materially different from the fellâh type; while in Sîwa, through which the great caravan route from Alexandria and Cairo viấ Murzuk to the Sûdân leads, and in Khârgeh, which lies on the route to Dâr-Fûr, the admixture of negro blood imparts its unmistakable stamp to the features of the inhabitants. There are no Coptic settlers in the oases, bat they are sometimes temporarily met with there in the capacity of merchants or government clerks; and Europeans are still more rarely encountered. The population of the oases is comparatively small (Khârgeh, according to Schweinfurth, possessing 6340 souls; according to Rohlfs, Dâkhel 17,000, Farâfra 320 , Bahrîyeh about 6000 , and Sîwa 5600 , and the narrow limits of the cultivable soil prevents it from increasing; but a more auspicious era may now be in store for these isolated communities if they follow the example set by the inhabitants of Dâkhel by sinking fresh wells and thus extending their territory. As a rule, even in the most favourably circumstanced oasis of Dâkhel, the physique of the population is poor and stunted, owing partly to their almost exclusive vegetable diet (of which Prof. Virchow has found evidence in the condition of the teeth of skulls from the ancient tombs of Dâkhel), and partly to the unhealthiness of the climate, which has been notorious from the remotest antiquity. In the early Egyptian period, and also during the domination of the Roman emperors, the oases were generally used as places of banishment, partly because their isolation rendered escape well-nigh impossible, and partly perhaps because the climate was expected to aggravate the misery of the exiles. The overplus of the water used for agricultural purposes forms a series of marshes, ponds, and lakes on the saline soil, and these last contribute greatly to the picturesqueness of the landscape in Sîwa, which is farther enhanced by a number of isolated
rocky heights; but the exhalations of these watery tracts in summer are very unhealthy. Within the last few centuries this evil has been aggravated by neglect, and the artificial swamps required for the rice cultivation are fraught with additional danger. Some measure for utilising the superfluous water, or at least rendering it harmless, is perhaps more urgently needed for the well-being of the oases than an increase of the water snpply. Under present circumstances Europeans had better abstain from visiting the oases from the beginning of April till the end of November, but in the winter months they may visit them safely. With regard to the construction of the dwellings in the oases it may be remarked that they all have more or less the character of townhouses, as, even at the present day, the unsafe state of the country requires them to be strongly built in close proximity to each other. Instead of the low hovels of the Nile valley, we therefore find in all the oases houses of several stories in height, somewhat rudely built of mad (and sometimes of stone, as at Bahrîyeh) and palm logs. A curious feature of these towns (recurring in the other oases of the Sahara also, as, for example, in the famous commercial town of Ghadames, to the S.W. of Tripoli) is the covered streets running under the upper stories of the houses, and sometimes of such length as to be perfectly dark. As, moreover, like most Oriental streets, they are generally crooked, it is hardly prudent for a stranger to venture into them without a guide. The main street of the town of Siwa winds in this manner up the rocky eminence on which the houses are built, and the place is indeed in this respect one of the most curious in the East.

As is usually the case with places lying at a distance from the outer world, the government of these commnnities is in the hands of the most respectable and wealthy members; and at Farâfra this paternal oligarchy is under the control of no government. Even at Sîwa the Mudîr appointed by the Egyptian goverment finds it difficnlt to assert his authority, and it is only the interminable and sometimes bloody quarrels of the leading parties of the Lifayeh and the Gharbîn (of whom the latter, as the name indicates, are immigrants from the west) that afford him an opportunity of interposing in his judicial capacity. In the other oases also, down to the middle of the present century, the power of the government officials was always to a great extent paralysed by that of the obstinate shêkhs; but after the repression of the Beduin revolt $\mathrm{Sa}^{\text {¢ }} \mathrm{i} d$ Pasha succeeded in firmly establishing the viceregal authority in the oases also. Since that period peace has reigned throughout the oases, and as the pressure of taxation is not nearly so heavily felt here as in the valley of the Nile the inhabitants are comparatively wealthy. Of late years, however, they have occasionally suffered from predatory attacks by nomadic marauders from the Cyrenaica, and even by the Arabs of the Nile valley. A disturbing element, too, has unfortunately sprung up in Sîwa, Bahrîyeh, and Farâfra, in the establishment and rapid spread of the Senûsi order of Mohammedans, by whom the introduction of all Christian cnlture is bitterly opposed. This religious order was founded about the middle of the present century by Sîdi Snûsi (or Senûsi, as the name is prononnced in Eastern Africa, where the vowels are more distinctly pronounced than by the Moghrebbins of Algeria and Morocco), a ṭâlib (or scripture scholar) of Tlemsen in Algeria, for the purpose of restoring the observance of Islâm to its original purity, and, above all, of warring against Christianity. Although the members of the order are regarded by other Mohammedan sects as Khoms, or heretics, they have rapidly acquired great power in the districts surrounding the eastern Sahara, and, like the Jesuits in Christian countries, have amassed considerable wealth, their principal treasnry being at Sarabûb, the chief seat of the order, two days' journey to the W. of Sîwa.
h. Climate. The climate of Egypt is to some extent influenced by the great artery on which the country's life depends, but the desert may be regarded as its chief regulator. But for the immense absorbing power of the desert the winter rains of the Mediterranean
regions would extend far up the Nile valley; and, but for its proximity, the great expanse of nearly stagnant water at the mouths of the Nile, covering an area of upwards of 2500 sq . M., would render the Delta one of the most unhealthy and uninhabitable regions in the world. The air of the desert is pleasantly cool, and possesses the most refreshing and health-giving qualities; indeed, to borrow Bayard Taylor's expression, it is a true 'elixir of life'. To the delicious purity of the air t of the desert a kind of parallel is afforded by the excellence of the water of the life-giving Nile.

Rain, throughout a great part of Egypt proper, is a very rare phenomenon. At Cairo the fogs of winter are rarely condensed into showers of any duration, and the rain occasionally blown inland from the sea seldom lasts long. Observations carried on at Cairo for five years show a mean annual rainfall of only $11 / 2$ inch, while the mean at Alexandria for a period of fourteen years was 8 inches. The unusual frequency of rain during the last few years has been absurdly attributed to the great increase of the area planted with trees, a boon which the country owes to the government of the Khedive Isma'il. The winters of these same years were also unusually wet in Greece and other regions adjoining the Mediterranean where but little rain generally falls, so that the weather of these exceptional seasons was doubtless affected by unknown climatic influences extending far beyond the limits of Egypt. The recent formation of the extensive Bitter Lakes in the Isthmus of Suez has also no influence on the climate except in their own immediate neighbourhood. If the banks of the Red Sea still remain desert in spite of the huge evaporating surface beside them, what change of importance could be expected from the artificial creation of a few square miles of water? The whole of the base of the Delta lies within the region of the winter rains, which from January to April are blown inland by the then prevailing sea-breezes to a distance of $30-50$ English miles. In Upper Egypt, on the other hand, rain is almost unknown, and it is not uncommon to meet with adult natives who have never seen a single shower. In that part of the country a thunder-shower, or perhaps the extreme fringe of the tropical rains, falls at rare intervals in April or May to the no small wonder of the natives. These showers are more frequent above the first cataract, and they recur regularly a little to the $\mathbf{N}$. of New Donkola or 'Ordeh ( $19^{\circ} \mathrm{N}$. lat.) , while to the S. of Shendi there is annually a short wet season, with its concomitants of malaria and fever. The rainfall in the deserts on each side of the Nile is very unequally distributed, but of these regions also it is approximately true that rain is of very partial and sporadic occurrence. Thus there

[^6]are vast tracts of the Libyan desert which for years together derive their sole moisture from the damp north and north-westerly winds, and when the wind is in any other quarter they are even deprived of their nightly refreshment of dew. On the Arabian side the case is materially different. There, along the coast of the Red Sea, runs a range of mountains $4800-10,000 \mathrm{ft}$. in height, where occasional, but very violent showers fall between October and December, hollowing out the deep valleys which descend to the Nile. Although these desert raius are of too short duration permanently to affect the character of the country, their fertilising effect on the light and loose soil is far greater than if they had to penetrate a heavier soil covered with thick vegetation.

As the year is divided in the valley of the Nile by the rise and fall of the river into two well-defined seasons, one when the soil is moist and easily cultivated, and the other when nothing will grow without artificial irrigation, so also it may be divided in accordance with the prevalent Winds into two different periods of eight and of four months. North winds prevail as a rule from the middle of June to the middle of February, and south (S.E. and S.W.) during the rest of the year (while in the Red Sea the prevalent winds at these seasons are almost exactly in the reverse directions). Early in the afternoon of a day during the second of these seasons the wind, as is the case in all tropical regions, sometimes rises to a hurricane, in which case it is called a 'Samûm'. Of this wind there are two or three different varieties: (1) It is called a 'Shôbeh' when it blows chiefly from the east or west, and (2) a 'Merîsi' when it comes directly from the south. In the latter case it is also sometimes called a 'Khamsîn', but this name more properly applies to the very hot, dry, and dust-laden winds which frequently blow unremittingly for one or two whole days together, and render the climate peculiarly trying in March and April (comp. p. xiv).

The name Khamassin, as it is more correctly written, is the plural of Khamsin, signifying 'fifty', and is applied to these winds in consequence of the fact that they prevail only during a period of fifty days before the summer solstice, after which they invariably cease. The Arabs confine this name to the period, and name the winds themselves shard. The wind to which the name is applied in winter affords but a feeble idea of the Khamsin of the hotter season, which forms the only disagreeable feature of the Egyptian climate, and one from which there is no escape. The impalpable sand finds its way into the most carefully closed rooms, boxes, and even watches, and the parching heat is most destructive to the blossoms of fruit-trees.

In accordance with the Temperaturb the Egyptian year may also be divided into two seasons, a period of hot weather, lasting eight months (April to November), and a cool season of four months (December to March). Throughout the whole country the heat gradually increases from April till the middle or end of June, and many of the superstitious natives believe that a perceptible freshening of the air takes place on the night of the 'dropping' (17th June ; see p. ciii). In Alexandria the blowing of the N. N.W. wind
sometimes interrupts the regular increase of the heat，so that the maximum may be reached as early as May or June or may be post－ poned to September or October．The maximum heat in the Delta is about $95^{\circ}$ Fahr．in the shade，in Upper Egypt about 1090．At Cairo the thermometer sometimes rises as high as $114^{\circ}$ during the prevalence of the Khamsîn．In December，January，and February the temperature is at its lowest，falling in the Delta to $35^{\circ}$ ，in Alex－ andria to $40^{\circ}$ ，and in Upper Egypt to $41^{\circ}$ ．The quicksilver rarely sinks to the freezing－point，except in the desert and at night．On 16th Feb．，1874，during Rohlfs＇expedition in the Libyan desert， the thermometer fell to $23^{\circ}$ ．About sunrise the traveller will some－ times find a thin coating of ice in his basin，or on neighbouring pools of water，where，owing to the rapid evaporation，the temper－ ature falls several degrees lower than in the surrounding air．As a rule，throughout the whole country，and at every season，the tem－ perature is highest from 1 to 5 p．m．，and lowest during the two hours before sunrise．The result of the observations of ten years has been that the mean temperature in the Delta and at Cairo is $58^{\circ} \mathrm{Fahr}$ ． in winter， $78^{\circ}$ in spring， $83^{\circ}$ in summer，and $66^{\circ}$ in autumn．M． Pirona＇s observations，carried on for fourteen years，fix the mean temperature on the coast near Alexandria at $60^{\circ}$ in winter， $66^{\circ}$ in

|  |  | $\begin{aligned} & \text { 邑 } \\ & \text { \# } \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 䍖 } \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 鄂 } \\ & \stackrel{\rightharpoonup}{d} \\ & 0 \end{aligned}$ | 荡 | 㫛 | 硅 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＋124 | ＋40，89 | ＋51，11 | 99 | ＋29，78 | ＋37，22 | $+74$ | ＋18，67 | ＋23，33 | ＋49 | $+7,56$ | ＋9，44 |
| 123 | 40，44 | 50，56 | 98 | 29，33 | 36，67 | 73 | 18，22 | 22，78 | 48 | 7，11 | 9，89 |
| 122 | 40,00 | 50，00 | 97 | 28，89 | 36，11 | 72 | 17，78 | 22，22 | 47 | 6，67 | 8，33 |
| 121 | 39，56 | 49，44 | 96 | 28，44 | 35，56 | 71 | 17，33 | 21，67 | 46 | 6，22 | 7，78 |
| 120 | 39，11 | 48，89 | 95 | 28，00 | 35,00 | 70 | 16，89 | 31，11 | 45 | 5，78 | 7，22 |
| 119 | 38，67 | 48，33 | 94 | 27，56 | 34，44 | 69 | 16，44 | 20，56 | 44 | 5,33 | 6，67 |
| 118 | 38，22 | 47，78 | 93 | 27，11 | 33，89 | 68 | 16，00 | 20，00 | 43 | 4,89 | 6，11 |
| 117 | 37，78 | 47，22 | 92 | 26，67 | 33，33 | 67 | 15，56 | 19，44 | 42 | 4，44 | 6，56 |
| 116 | 37， 33 | 46，67 | 91 | 26，22 | 32，78 | 66 | 15，11 | 18，89 | 41 | 4，00 | 5，00 |
| 115 | 36，89 | 46，11 | 90 | 25，78 | 32，22 | 65 | 14，67 | 18，33 | 40 | 3，56 | 4，44 |
| 114 | 36，44 | 45，56 | 89 | 25，33 | 31，67 | 64 | 14，22 | 17,78 | 39 | 3，11 | 3.89 |
| 113 | 36，00 | 45，00 | 88 | 24.89 | 31，11 | 63 | 13，78 | 17，22 | 38 | 2，67 | 3.33 |
| 112 | 35，56 | 44，44 | 87 | 24，44 | 30，56 | 62 | 13，33 | 16，67 | 37 | 2，22 | 2，78 |
| 111 | 35． 11 | 43，89 | 86 | 24,00 | 30,00 | 61 | 12，89 | 16，11 | 36 | 1，78 | 2,22 |
| 110 | 34， 67 | 43，33 | 85 | 23，56 | 29，44 | 60 | 12，44 | 15，56 | 35 | 1，38 | 1，67 |
| 109 | 34，22 | 42，78 | 84 | 23，11 | 28，84 | 59 | 12，00 | 15，00 | 34 | 0,89 | 1,11 0.56 |
| 108 | 33，78 | 42，22 | 83 | 22，67 | 28,33 | 58 | 11，56 | 14，44 | 32 | 0,44 0,00 | 0,56 0,00 |
| 107 | 33,33 <br> 32,89 <br> 2 | 41,67 41,11 | 82 | 22， 22 | 27，78 | 57 | 11,11 10,67 | 13，33 | 31 | －0，44 | －0，56 |
| 105 | 32，44 | 40，56 | 80 | 21，33 | 26，67 | 55 | 10，22 | 12．78 | 30 | 0，89 | 1，11 |
| 104 | 32，00 | 40，00 | 79 | 20，89 | 26，11 | 54 | 9，78 | 12，22 | 2 | 1，33 | 1，67 |
| 103 | 31，56 | 39，44 | 78 | 20，44 | 25，56 | 5 | 9，33 | 11，67 | 28 | 1，78 | 2，22 |
| 102 | 31，11 | 38，89 | 77 | 20，00 | 25，00 | 52 | 8，89 | 11，11 | 27 | 2，22 | 2，78 |
| 101 | 30，67 | 38，33 | 76 | 19，56 | 24，44 | 51 | 8,44 | 10，56 | 26 | 2，67 | 3，33 |
| 100 | 30，22 | 37，78 | 75 | 19，11 | 23，89 | 50 | 8，00 | 10，0\％ | 25 | 3，11 | 3，89 |

spring, $77^{\circ}$ in summer, and $74^{\circ}$ in autumn. At Alexandria the summer days are much cooler and the winter nights much warmer than at Cairo, but the moisture of the air makes the heat much more oppressive. In the drier air the constant absorption of moisture from the skin keeps the body at a much lower temperature than that of the surrounding air, and thus renders the great heat of the desert much more bearable than one would expect. The strong sea-breezes at Alexandria also make the heat of summer less oppressive than it is at many places on the Mediterranean situated much farther to the $\mathbf{N}$.

As three different thermometers are used in Europe, - those of Fahrenheit, Celsius, and Réaumur ( $1^{\circ} \mathrm{F} .=5 / 9^{\circ} \mathrm{C} .=4 / 9^{\circ} \mathrm{R}$.). - the traveller may find the accompanying table convenient for reference.
i. Agriculture. I. Capabilitibs of the Soll. In the time of the Pharaohs the Egyptian agricultural year was divided into three equal parts, the period of the inundation (from the end of June to the end of October), that of the growing of the crops (from the end of October to the end of February), and that of the harvest (from the end of February to the end of June). At the present day there are two principal seasons, corresponding to our summer and winter, besides which there is a short additional season, corresponding with the late summer or early autumn of the European year. The land is extremely fertile, but it is not so incapable of exhaustion as it is sometimes represented to be. Many of the crops, as elsewhere, must occasionally be followed by a fallow period; others thrive only when a certain rotation is observed (such as wheat, followed by clover and beans); and some fields require to be artificially manured. Occasionally two crops are yielded by the same field in the same season (wheat aud saffron, wheat and clover, etc.). The great extension within the last twenty-five years of the cultivation of the sugar-cane, which requires a great deal of moisture, and of the cotton-plant, which requires extremely little, has necessitated considerable modifications in the modes of irrigation and cultivation hitherto in use. As both of these crops are of a very exhausting character, the land must either be more frequently left fallow, or must be artificially manured. The industry and powers of endurance of the Egyptian peasantry are thus most severely tried, although the homogeneous soil of the valley of the Nile requires less careful tilling and ploughing than ours. As the dung of the domestic animals is used as fuel throughout Egypt, where wood is very scarce, that of pigeons (p. lxxviii) is almost the only kind available for agricultural purposes. An abundant source of manure is afforded by the ruins of ancient towns, which were once built of unbaked clay, but now consist of mounds of earth, recognisable only as masses of ruins by the fragments of pottery they contain. Out of these mounds, which conceal the rubbish of thousands of years, is dug a kind of earth sometimes containing as much as 12 per cent of saltpetre, soda, ammonia, and other salts.
II. Irrigation. The whole of the cultivable soil of Egypt is
divided into two classes in accordance with its relative height above the surface of the Nile : (1) The 'Rai', or fields which retain their moisture after the subsidence of the overflow long enough (or nearly long enough) to admit of the ripening of the crop without additional irrigation; (2) The 'Sharâlci', or those which always require artificial irrigation. The irrigation is effected by means of : (1) The 'Sâkiyeh', or large wheels (rarely exceeding 30 ft . in diameter), turned by domestic animals of various kinds, and fitted with scoops of wood or clay, resembling a dredging-machine. (In the Fayûm a peculiar kind of water-wheel is in use, so contrived as to be turned by the weight of the water.) According to Figari-Bey, the number of sâhiyehs used in Central and Lower Egypt in 1864 was about 50,000 , which were turned and superintended by 200,000 oxen and 100,000 persons, and irrigated $4,500,000$ acres of land. (2) The 'Shâduff', an apparatus resembling that of an ordinary well, set in motion by one person only, and drawing the water in buckets resembling baskets in appearance; as a substitute for the sàkiyeh several shâdûfs are sometimes arranged one above the other. (3) When it is possible to store the water in reservoirs above the level of the land to be watered, it is allowed to overflow the fields whenever required. This is the only method available in the oases, where fortunately the water rises from the springs with such force as to admit of its being easily dammed up at a sufficiently high level. (4) Pumps driven by steam are also used, particularly when a large supply of water is required, as in the case of the sugarplantations on the 'Gefs' of the Nile in Northern Egypt, where they are seen in great numbers. (5) Lastly the ' $T \hat{a} b \hat{u} t$ ', a peculiar, very light, and easily moved wooden wheel, which raises the water by means of numerous fans, is used in the Lower Delta only and in places where the level of the water in the canals remains nearly the same. In order to distribute the water equally over flat fields, they are sometimes divided into a number of small squares by means of embankments of earth, 1 ft . in height, which, owing to the great plasticity of the Nile mud, are easily opened or closed so as to regulate the height of the water within them.

Before describing the different Egyptian agricultural seasons, we must first observe that they are no longer so sharply defined as they probably were in ancient times. Besides the old crops, there are now several others of recent introduction, and so extensively grown as in some measure to revolutionise the modes of cultivation. These are maize, rice, the sugar-cane, cotton, ramieh, and indigo. (This last plant was known to Pliny, but it was probably grown in his time only to a very limited extent.) The agrarian measures of the Egyptian government are all directed towards the emancipation of farming from its dependence upon the inundations, in order that every crop may be cultivated at the season in which it thrives best. The modern embankments and apparatus for the regulation of
the water supply vie in importance with the greatest ancient works of the kind; and the services of Sir Colin Scott Moncrieff and his successor Mr. Garstin cannot be easily over-estimated.
III. Agricultural Seasons. (1) The Winter Crop, or 'EshShitâwi', grown exclusively on the 'Rai' land (p. lxxi), is sown immediately after the subsidence of the inundation, which takes place progressively from S. to N. In Upper Egypt seed-time accordingly begins as early as the middle of October, in Central Egypt (from Siût to Cairo) at the beginning of November, and in the Delta about the end of December. The ground is seldom prepared for so wing by the use of the plough. The seed is scattered over the still soft and moist soil, and is then either pressed into it by means of a wooden roller, beaten into it with pieces of wood, or trodden in by oxent. Throughout the whole country a period of four months elapses between seed-time and the completion of the harvest. The winter harvest is, therefore, over in Upper Egypt about the middle of February, in Central Egypt about the middle of March, and in the Delta towards the end of April. In Upper and Central Egypt this is the most important harvest of the whole year. The principal crop everywhere is wheat (occupying 50 p.c. of the fields in Upper Egypt and 30 p.c. in the Delta), next to which are barley ( 10 p.c. and 14 p.c. in these regions respectively), clover ( 10 p.c. and and 24 p.c. respectively), and broad beans ( 20 p.c. and 12 p.c. respectively).
(2) The Summer Crops ('Ess-Sêfi' or 'El-Kêedi') are much more varied than those of winter, but they are comparatively unimportant in Upper and Central Egypt, as the cultivable land in these regions is very narrow, and belongs chiefly to the 'Rai' category, two-thirds
$\dagger$ The Agricultural Implements of the Egyptians are exceedingly primitive and defective. The chief of these is the plough (mihrat), the form of which is precisely the same as it was 5000 years ago; and the traveller will recognise it on many of the monuments and in the system of hieroglyphics. It consists of a pole about 6 ft . long, drawn by an ox, buffalo, or other beast of burden, attached to it by means of a yoke, while to the other end is fastened a piece of wood bent inwards at an acute angle, and shod with a three-pronged piece of iron (lisan). Connected with the pole is the handle which is held by the fellâh. These rude and light ploughs penetrate but slightly into the ground. (On the estates of the Khedive, Fowler's steam-plough is now frequently employed.) The harrow is replaced in Egypt by a roller provided with iron spikes (kumfud, literally 'hedgehog'). The only tool used by the natives on their fields, or in making embankments of earth, is a kind of hoe or shovel (migrafeh). The process of reaping consists of cutting the grain with a sickle ( mingal), or simply uprooting it by hand. The n6. $\alpha \mathrm{g}$, or 'threshingsledge', consists of a kind of sledge resting on a roller provided with sharp semi-circular pieces of iron, and drawn by oxen or buffaloes. This primitive machine, being driven over the wheat, peas, or lentils to be threshed, crushes the stalks and ears and sets free the grain or seeds. The corn is separated from the fragments of straw by the careful removal of the latter, and by tossing it to and fro in a draughty place. The grain is afterwards passed through a sieve.
of it being under water during summer. In the Delta, on the other hand, summer is the farmer's most important season. The vegetation with which its whole surface is densely clothed in June and July is marvellously rich and beautiful, thousands of magnificent trees clustered in groups afford delightful shelter from the fierce rays of the sun, and the eye ranges over an immense expanse teeming with luxuriant crops. Another charm of the country in summer consists in its abundantly stocked gardens and orchards: but of all these attractions the traveller who, like a bird of passage, merely seeks refuge in Egypt from the cold and rains of a northern winter cannot possibly form any adequate idea. At this season every district of Egypt has its favourite crop; in Upper Egypt, between Assuân and Esneh, the penicillaria, and in the Delta rice are chiefly cultivated; while the peculiar looking indigo-plant, a rich profusion of grapes, and a plentiful growth of cucumbers and melons are seen in every part of the country. The summer cultivation, of which the 'Sharâki' land alone is capable, is carried on from April to August; but many of the plants grown at this season require a longer period of development, extending throughout the whole of the autumn and even part of the winter. This is particularly the case with the rice crop, which is sown in May, but does not attain maturity till the middle of November, and with the cotton-plant, sown in April, and harvested in November or December. A large quantity of cotton is also yielded by a second harvest from the pruned plant in the month of August, in the second year of its growth. Summer is also the principal season for the tobacco crop.
(3) The Autumn Season ('En-Nabâri' or 'Ed-Denûri'), as already observed, is the shortest season, extending to little more than seventy days; and yet within this brief space the rich soil of the Delta yields its harvest of maize, which, next to wheat, is the most important of the Egyptian cereals. (The annual yield of these two grains is said to amount to 24 million bushels.) The autumn cultivation lasts from August to October, and sometimes till November. At the beginning of October, throughout the whole Delta from Suez to Alexandria, the traveller will observe an almost unbroken ocean of maize-fields, seldom varied except by the low villages, resembling mounds of earth, with their neighbouring palm groves. The picture of teeming fertility which the country then presents far surpasses that presented by the rich maize-fields of south-eastern Europe. In Central Egypt maize is also an important summer crop. Along with it is sometimes cultivated the less common Sorghum, or Dura, or Indian millet, which is eaten by the poorest fellâhîin only. It is, however, largely consumed by the Beduins on the Arabian side of the Nile, and in the Sûdân and Nubia forms the chief food of the inhabitauts. Another plant cultivated in autumn, rarely seen in Egypt, but common in the Sûdàn and Nubia, is the tropical Sesame, from which oil is largely prepared.
4. Farm Produce of Egypt. The following is an enumeration of all the most important industrial crops cultivated within the boundaries of Egypt. On hearing the names of those with which he is unacquainted, the traveller may identify them with the aid of the Egyptian names given below. The various products are enumerated in the order of their importance.
a. Cereals. 1. Wheat (kamh; that from the Delta, kamh bahri; from Upper Egypt, kamh safidi). 2. Maize (dura shämi, i.e. Syrian; called in Syria dura only). 3. Barley (sharir). 4. Rice ( $r^{\prime}(z z z$ ), cultivated only in the lower part of the Delta of Alexandria and Rahmânîyeh, as far as Manṣûra, Zakâzîk, Sâlihîyeh, and in the Wâdi Tumîlât, and also in the Fayum and in the oases of the Libyan desert. 5. Sorghum vulgare (dura beledi, i. e. dura of the country; simply called dura in the Sûdân; Ital. sorgho, Engl. caffrecorn, and the Tyrolese sirch). 6. Penicillaria (dukhn). 7. Sorghum sacch aratum.
b. Podded Fruits. 1. Broad beans (fal). 2. Lentils ('adas). 3. Chickpeas (hummus). 4. Lupins (tirmis). 5. Peas (bisilla). 6. Dolichos Lubia (labiya). 7. Dolichos Lablab (lablab), which is very frequently seen festooning walls and pinnacles, but is also grown in fields in separate plants. 8. Vigna Sinensis. 9. White beans (lâbiya frengi). 10, Phaseolus Mungo. 11. Horse beans (Canavalia gladiata).
c. Green Crops. 1. White Egyptian clover (bersîm). 2. Fænum Græcum (helbeh, frequently ground into flour and used in making bread; also generally eaten raw by the natives in winter; not to be confounded with clover). 3. Medicago sativa, or lucerne (bersîm hegâzi). 4. Lathyrus sativus, or flat pea (gulbân). 5. Sorghum halepense (gerau).
d. Stimulants. 1. Virginian tobacco, or Nicotiana Tabacum (aukhân ahmar). 2. Peasant's tobacco, or Nicotiana rustica (dukhan akhdar). 3. Poppies, for the manufacture of opium ( $a b u-n \imath m$, or 'father of sleep'). 4. Indian hemp (hashîsh; comp. p. xxiv).
e. Textile Materials. 1. Cotton (kotn), introduced from India in 1821, but extensively cultivated since 1863 only. 2. Flax (kettan). 3. Hemp (tîl). 4. Hibiscus cannabinus.
f. Dyes. 1. Indigo argentea, a peculiar kind (nîleh). 2. Lawsonia inermis (henna), used for dyeing the nails, the palms of the hands, and the soles of the feet yellowish red (a very ancient custom, which has recently been prohibited); properly a tree, but, like the tea-plant, cultivated in fields in the form of a dwarfed bush. 3. Saffron (kartam or 'osfur). 4. Madder (faa), cultivated in small quantities. 5. Reseda Luteola (bliya), used as a yellow dye.
g. Oil Plants. 1. Castor-oil plant (khiproa). 2. Sesame (sim-sim). 3. Lettuce (khass), very largely cultivated. 4. Rape (selgam). 5. Chicory (hendebeh). 6. Mustard (khardal, or kabar). 7. Arachides, or earth-nuts (fal sennâri, or simply fal). 8. Saffron (as an oil-yielding plant). 9. Poppy (as an oil-plant). 10. Garden cress, or Lepidium sativum (rishâd).
h. Spices. 1. Capsicum annuum, the Italian peperone (filfil ahmar). 2. Capsicum frutescens, or Cayenne pepper (shitêta). 3. Aniseed (yansûn, or ânîsan ). 4. Coriander (kusbara). 5. Caraway (kemman). 6. Nigella (kemman aswad). 7. Dill (shcmar). 8. Mustard.
i. The Sugar Cane (kasab es-sukhar) has of late been largely cultivated in the N. part of Upper Egypt for the purpose of being manufactured into sugar. An inferior variety, which is eaten raw, introduced from India in the time of the khalifs, is cultivated in every part of the country.
k. Vegetables. 1. Bamyas, or Hibiscus esculentus (bamiya). 2. Onions (basal). 3. Pumpkins (kar'a). 4. Cucumbers (khiyar). 5. Egyptian cucumbers (frequently trumpet-shaped and ribbed; different varieties called "abdelâwi, 'agâ’, etc.). 6. Melons (kâwan; the best, shammâm). 7. Water-melons (battîkh). 8. Melonzanes (bädingán). 9. Tomatoes (tomátin). 10. Corchorus olitorius (melakhîyeh). 11. Colocasia (kulkâs). 12. Garlic (tam). 13. Mallows (khobbézeh). 14. Cabbage (korumb). 15. Celery (kerafs). 16. Radishes, a peculiar kind, with fleshy leaves, which form a favourite article of food (figl). 17. Lettuces (khass). 18. Sorrel (hommêd). 19. Spinach (es-sibânikh). 20. Parsley (bakdanis). 21. Purslane (rigl). 22. Turnips (lift).
23. Carrots (gezer, a peculiar kind, with red juice). 24. Beetroot (bangâr). A variety of other vegetables are cultivated in small quantities in gardens, exclusively for the use of European residents.
5. Trees and Plantations. During the last twenty-five years new avenues and parks have been so extensively planted that Egypt will soon present a far greener and more richly wooded appearance than formerly. In ancient times every square foot of arable land seems to have been exclusively devoted to the cultivation of industrial crops, the natives preferring to import from foreign countries the timber they required for ship-building purposes, and probably also the small quantity employed in the construction of their temples. The best proof of the scarcity of good timber in Egypt is afforded by the fact that sycamore-wood, one of the worst possible kinds owing to the knottiness and irregularity of its grain, has been laboriously manufactured into coffins and statues. Mohammed 'Ali, a great patron of horticulture, at one time offered prizes for the planting of trees, but his efforts were unattended with success, as the climatic and other difficulties attending the task were then but imperfectly understood in Egypt, Ibrâhîm planted trees in the Ezbekîyeh lake, which had been drained, and along the road between the city and the Nile; and several hundred varieties of Indian trees were introduced on the island of Rôda, where, however, only a few scattered traces of them are now to be found. 'Abbâs I. and Sa'îd were sworn enemies to trees of every kind, and they were content that their palaces should be exposed to the full glare of the sun. The Khedive Isma'îl, however, at length revived the plans of his celebrated ancestor, and by the engagement of M. Barillet (1869), superintendent of the gardens of Paris, one of the most skilful landscape-gardeners of the day, introduced an entirely new feature into Egyptian scenery. Hundreds of thousands of trees were planted within a few years, and their shade has converted many of the dusty and stifling roads in and around Cairo into pleasant promenades. The finest of all these trees, both on account of its umbrageousness and the excellence of its wood, and one which thrives admirably, is the lebbek (Albizzia Lebbek), which has long been erroneously called by travellers the acacia of the Nile (the latter being properly the sunt tree). Within forty years the lebbek attains a height of 80 ft . and a great thickness, while the branches project to a long distance over the roads, covering them with a dense leafy canopy within a remarkably short time. About two hundred different kinds of trees, chiefly of E. Indian origin, are now planted in the parks of the Khedive (about twenty in number), and they are constantly multiplied in nurseries laid out for the purpose. Among the most important of these are the magnificent ' Fl amboyer des Indes' (Poinciana pulcherrima) and the rapidly-growing Eucalyptus, tropical fig-trees, and several rare varieties of palms.

The commonest Trees of an Earlier Period which the traveller will encounter in every town in Egypt are the following: - The Acacia

Nilotica (sunt), the thorn-tree of antiquity, the pods of which, resembling rosaries ( $g$ dh $\cdot v a t$ ), yield an excellent material for tanning parposes. Next to the palm, this is the tree most freqnently seen by the wayside and in the villages. The Acacia Farnesiana (fatneh), with blossoms of delicions perfume. The sycamore (gimméz), anciently considered sacred. The zizyphas, or Christ's thorn-tree (nebk). Tamarisks (tarfa; not to be confounded with tamarinds). The Parkinsonia (sêseban, a name also applied to the wild Sesbania shrub). Mnlberry-trees (tat), in Lower Egypt only. Carob-trees, or bread of St. John (khavvab). The cypress, olive, poplar, plane, myrtle, Aleppo pine, Shinns, Melia, and various fig-trees of Indian origin are of less frequent occurrence.

Among the Fruit Trees the most important is the date-palm (Phoenix dactylifera; nakhleh; the date, balah; the rib of the leaf, gerid; the leaf, lif; the points of the leaf, sacaf; the crown, gummar.). The date-palms blossom in March and April, and the fruit ripens in August and September. Fresh dates are rongh in appearance, blood-red or pale yellow in colour, and harsh and astringent in taste. Like the medlar, they become more palatable after fermentation has set in. There are no fewer than twenty-seven kinds of date commonly offered for sale. The largest attain a length of three inches, and are called $i b r i m i$, or $s u k k o t i$, as they come from N. Nubia. The most delicately flavoured are the small dark brown ones known as amhat, which are eaten fresh. The Beduins offer for sale at the hotels a kind of date-preserve packed in what professes to be gazelleskins, but is usually goats' leather ('agweh). Palm-wine (lagbi), obtained by boring the heart of the crown of the palm, whereby the tree is killed, is met with in the oases only. Excellent brandy, however, is distilled from the fruit. The value of the dates exported annually amounts to about one million francs only, as they realise too high a price in the conntry itself to remunerate the exporter.

The vine thrives admirably in Egypt, and grapes (coenab) abound from July to September. Wine was extensively made from them in ancient times, and this might still easily be done, were it not that Egypt is already amply supplied with cheap and excellent wines from every part of the Mediterranean. The vine blossoms in March and April, like the palm, and the grapes ripen in June and July. Oranges (burtukân) are abundant and cheap (the harvest beginning in September), and so also are mandarins and lemons (the small and juicy fruit of the Citrus limonium); citrons and cedros are of less frequent occurrence. Among other fruittrees we may also mention the p(megranate (rumman), which is specially cultivated for the benefit of the Turks, who are very partial to them, and which yields a handsome return. Apricots are common, but quite destitute of flavour, and the same remark applies to the peaches ( $k h \delta k h$ ); almonds (loz) are also frequently seen. Throughout the whole of L.ower Egypt figs ( $t \hat{i} n$ ) abound in summer, and the cactus-fig ( $t \hat{i} n-s h 6 k$ ) is also a favourite fruit. Apples, quinces, pears, and plums abound, particularly in the region of Girgeh and in the Fayûm, but these last are perfcctly tasteless; these fruits, moreover, are so abundantly brought to the market from the Mediterranean regions that no attempt is made to extend their cultivation in Egypt. Within the last ten years the banana (moz) has gradually become naturalised in Egypt, but it is still a somewhat expensive fruit ( $1-1 / 2 \mathrm{fr}$. per pound). A delicacy imported from the $W$. Indies for the benefit of strangers is the Anona squamosa (kishta, i.e. 'cream'). Pine-apples are very rarely seen. Fine tropical fruits of this kind (including also the mango) are only to be found in the gardens of the Khedive, where, however, their capability of acclimatisation has been abundantly proved.

The principal Decorative Plants are roses (ward; of which the Rosa Damascena moschata and the sempervirens are specially cultivated for the manufacture of otto of roses), oleanders of astonishing height, carnations, and geraninms, all of which have been grown in Egypt from a very early period. A bushy tree, which in its half-leafless condition attracts the attention of every traveller on landing at Alexandria in winter, is the Poinsettia pulcherrima. The insignificant blossom is surrounded by leaves
of the most brilliant red, presenting a very pictaresque and striking appearance. Natural forests, or even solitary wild trees, are never met with in the valley of the Nile or in the valleys of the northern deserts. On the embankments and on the brink of the rivers we occasionally find wild tamarisks and willows (safsaf), but always in the form of mere bnshes. In the desert-valleys of Upper Egypt, however, grow five different kinds of acacia and several other shrubs of inferior interest. Another tree of considerable importance is the beautiful dam palm, which grows wild in the valleys of S. Nubia and even in the oases, but those which occur in N. Egypt are always planted. Even in Lower Egypt it is not met with beyond $27^{\circ} \mathrm{N}$. latitude (indeed hardly beyond Keneh), and attempts to acclimatise it at Cairo have never been successful. Lastly we may mention two circnmstances which throw some light on the botanical position of Egypt. One of these is, that the commonest weeds associated with the industrial crops of Egypt, and which occur nowhere else, are of E. Indian origin; and the other, that numerous plants cultivated by the Egyptians are now to be found only in their wild condition in the central regions of Africa.
j. The Animal Kingdom in Egypt. (By $D_{r^{*}}$. M. Th. von Heuglin.)
I. Domestic Animals. The Horse (hosân; horses, khell; mare, faras; foal, muhr; the rider, khayyal) was probably unknown to the most ancient Egyptians, and was first introduced by the Hyksos (p. cvii). It is now to be met with thronghout the whole of the valley of the Nile, and even in the oases. Owing to want of proper care and insnfficiency of food, the Egyptian horses are generally of insignificant appearance.

The Egyptian Donkey (Arab. homar; comp. p. xviii) is noted for its power of endnrance, its spirited temper, and its moderate requirements.

The Mule (Arab. baghl, or baghleh), althongh admirably adapted for carrying heavy burdens, is less frequently bred in Egypt, but is sometimes imported from Abyssinia, Spain, and other parts of Sonthern Europe, Syria, and Asia Minor.

The Camel (Arab. gemel, fem. nâka; the camel for riding, hegin), was not unknown to the ancient Egyptians, as it is mentioned in several papyri, but it was probably rarely used, particularly during the early monarchy. Dnring the hottest weather the camel can dispense with water for three days or more, while its scanty provender consists of a few handfuls of maize or beans, of the dry and wiry desert grass, of straw, or of prickly acacia leaves.

The Buffalo (Arab. gamas) seems to have been long domesticated in Egypt. Its flesh is not esteemed, bnt the cows yield milk and butter. The buffalo reqnires little food and attention, but does not thrive except in swampy ground or in the vicinity of flowing water. The hide forms strong and valuable leather.

The $0 x$ (Arab. tor ; cow, bakara; calf, cigl; milk, leben; sweet milk, hal $\hat{b}$; sour milk, hamed or $r \cdot b$ ) thrives in Egypt on the dry soil of the arable land, and is also reared in the oases. Down to the year 1863 Egypt possessed a long-horned race of oxen which is often represented on the monuments; bnt the breed was entirely swept away by a cattleplague during that year. The fellâhîn make both butter and cheese from the milk. Instead of a chnrn they nse a leathern bag suspended from a rope (kirbeh).

The Goat (Arab. me'za or 'anzeh; he-goat, tês; kid, gidi) is to be found in every cottage on the banks of the Nile, and in every tent in the desert. Its milk is palatable and wholesome. The hide makes durable and waterproof water-bags.

Sheep (Arab. khar•af, nargeh, ghanam, ramis; ram, kebsh) are almost as generally kept by the Egyptian peasantry as goats, the most esteemed being the fat-tailed varieties (ovis pachycera recurvicanda and ovis platyura). The wool of the Egyptian sheep is harsh and wiry, while many of those in the desert have stiff, straight hair, and are altogether destitute of wool.

The Pig (Arab. khanzîv), which was regarded by the ancient Egyptians
as the emblem of Typhon, and is considered unclean by the Arabs, can hardly be called one of the domestic animals of Egypt, but it is kept by the Greek tavern-keepers.

The $D \circ g$ (Arah. kelb) thronghont the whole of the East is a masterless and half-wild animal. The usual hreed resemhles the jackal type, its colour heing of a light rusty tint. Every canine family has its regular heat, from which intruders are rigorously excluded. Most of the Egyptian dogs feed on street refuse.

The Cat (Arab. kott, kotteh), which was one of the sacred animals of the ancient Egyptians (comp. p. olviii), is now domesticated in almost every Egyptian and Beduin family.

The Weasel (mustela semipalmata; Arah. 'ersa, or abu 'ar'us), is occasionally kept, like the cat, for the parpose of keeping in check the mice of numerous kinds with which the country is infested. It is chiefly met with in a half-wild condition in Central and Lower Egypt, in the towns, farm-buildings, warehouses, and deserted dwellings.

Foremost among the various kinds of poultry kept by the Egyptians is the domestic Hen (Arab. farkha; cock, dik), the usual breeds of which are of small size. The artificial hatching establishments in Egypt are of very ancient origin.

The Turkey (Arab. farkha rami) is imported.
The domestic Goose (Arab. wuzzeh) is chiefly met with in Lower and Central Egypt, hut nowhere in large numbers. The Egyptian Dumestic Pigeon (Arah. hamam) is very common throughout the Nile Valley. The peasants erect large dovecots for these pigeons, which they keep solely for the sake of the manure they yield.
II. Wild Aninals. As there are no game-laws in Egypt, any one provided with a license from the police to carry fire-arms is at liherty to shoot anywhere and at any season, provided enclosed gardens he not entered, and growing crops respected. Permission to shoot on Lake Meuzaleh, however, must be obtained from the farmer of the fishings, an introduction to whom may easily be procured from the traveller's consul at Cairo.

Tolerable guns and other requirements for the chasse may be purchased at Cairo ( $\mathbf{p} .31$ ), hut gunpowder is bad and dear. Sportsmen who hring their own guns will find it very troublesome to clear them at the custom-house, and cartridges are contraband.

One of the favourite ohjects of the chase is the Arabian Mountain Goat (Ibex beden; Arah. beden or waral), which still freqnents the mountains between the Nile and the Red Sea.

Another inhabitant of the mountains is the 'Maned Sheep' (Ovis tragelaphus; Arab. kebsh el-má, or kebsh el-gebel), which is occasionally met with among the rocky hills near Minyeh and in the neighbourhood of the Fayûm.

A denizen of the plains between Cairo and Suez, and of the sandhills and heights which hound the valley of the Nile and the oases, is the Dorcas Gazelle (Antilope dorcas; Arab. ghazal), particularly during the dry and hot season.

On the Lihyan side of the Nile, in the region of the Natron Lakes and the Fayûm, and the tract extending thence to the oases, occur also the 'Spear Antelope' (Antilope leptoceros; Arab. abu-'l harab) and the Addax Antelope (Antilope addax; Arah. ackas, or bakar el-woahsh), besides which the Arahs mention a kind of 'Cow Antelope' (perhaps the Antilope bubalis).

The Wild Boar (Arah. hallaf) now occurs in a few districts only in the Delta and the Fayûm.

In similar localities the sportsman will also meet with the Marsh Lynx (Felis chaus; Arah. tifah), the small-footed Wild Cat (Felis maniculata; Arah. kote), the Egyptian Wolf (Canis variegatus; Arah. dîb), and the Ichneumon (Herpestes ichneumon; Arah. nims), which last, however, prefers gardens and the neighbourhood of farms and villages.

The Genet (Viverra genetta; Arah. kott zebad) is said to he met with occasionally in Egypt. Among the beasts of prey common in the lower
part of the Nile Valley we may also mention the various species of Foxes and Jackals (Canis vulpes, C. mesomelas, C. niloticus, C. aureus, C. famelicus, and Megalotis zerda; Arab. aburl-husén, aleb or ta‘leb, abu shom or $b a s h o m, ~ a n d ~ a b u s u f$ ) and the Skunk (Rhabdogale mustelina; Arab. abu 'afen). The fox and the jackal haunt cliffs, quarries, ruins, and heaps of rubbish. The long-eared F'ennec (Arab. Fenek, Zerdo), a kind of fox which subsists partly on vegetable food, lives gregariously in extensive burrows which it excavates in the sand of the desert.

Another beast of prey of freqnent occurrence is the striped Hyena (Hyaena stทiata; Arab. dab‘a), which usually secretes itself among ruins, quarries, or rocks during the day, and scours the country at night in search of dead or disabled domestic animals. The professional Egyptian hyena hnnters (Arab. $d a b b \tilde{a}\ulcorner a$ ), who are to be met with in many parts of the country, will generally undertake to catch any wild animal of which the traveller desires a specimen, and their services as guides to the sportsman will often be found aseful.

An animal of rare occurrence in Egypt, being confined to the side of the Egyptian coast-hills next to the Red Sea, is the Porcupine (Hystrix cristata; Arab. abu shひै $a$, or hanhan, or en-nîs), which lives in deep hollows excavated by itself.

On the banks of the Nile, and particularly in Upper Egypt, the Egyptian Hare (Lepus aegyptiacus; Arab. arnab) is frequently met with. It usually haunts those tracts which are overgrown with tamarinds.

Among the mountains of Sinai we frequently observe the Daman, or Cony (Hyrax syriacus; Arab. wabr), which lives in troops on the cliffs and stony slopes, and often lies basking in the sun on overhanging rocks, especially in the forenoon.

Wild fowl abound in Egypt, and frequently come within range of the sportsman's gun. Among these are the Ganga or Sand Grouse (Pterocles exustus, Pt. guttatus, and in Upper Egypt the Pt. coronatus also; Arab. kata), and the Red Partridge (Ammoperdix Heyi; Arab. hagel), which frequents the hills around the cataracts at Assuân, the E. slopes of the Arabian mountains in the direction of the Red Sea, and Mt. Sinai and its environs, extending as far as the Dead Sea. A kind of Red-legged Partridge (Arab. abu zerad, or sena) is also found in the Sinai range.

The Quail (Coturnix communis; Arab. summân, or sela) usually visits the Nile valley during its spring and autumn migrations only.

On the N. coast of Egypt the Little Bustard (Otis tetrax) is frequently seen in winter, and farther to the W. occurs the 'Collared Bustard' (Otis hubara; Arab. hubara).

We may also mention the Nile Goose and the Turtle Dove (Turtur senegalensis and T. isabellinus; Arab. Kimri) as natives of Egypt. The Nile Valley and the lagoons of the Delta are also largely visited by Birds of Passage. Many of these proceed still farther to the S., but by far the greater number remain for three or four months among the swamps of Lower Egypt, and in the region of the Natron Lakes and the Birket el-Kurûn in the Fayûm.

Among the numerous water-fowl, including ducks and flamingoes, several species of heron, and perhaps swans also, which breed in the Delta and partly in the Fayûm, are the superb 'Sultan Bird' (Porphyrio smaragdonotus; Arab. dikmeh) and the beautiful Golden Snipe (Rhynchaea capensis).

Lastly we must mention the Crocodile (Arab. timsâh), the largest and most famous of Egyptian reptiles, which sometimes attains a length of thirty feet. Although gradually disappearing before the march of modern civilisation, it is still sometimes to be found in the valley of the Nile above Girgeh, and more frequently between the cataracts of Assuân and the Wâdi Halfa, while occasionally, having lost its way during the innndation, it descends to the vicinity of the Delta. Crocodiles are sometimes seen fast asleep, often with widely opened jaws, basking in the sun on flat sandbanks or on the ends of low islands, to which they most frequently resort after cool nights. In Egypt, however, where it is oftener hunted than in more southern regions, the crocodile is generally too
wary to be caught napping, though it sometimes becomes entangled in the nets and falls a prey to the fishermen. The Arabs of the Sûdân, who eat the flesh of the reptile and prepare a kind of musk from its glands, freqnently angle for it with large hooks baited with meat.

It is seldom worth while to fire at crocodiles when swimming, as they usually disappear in the turbid water, even when mortally wounded. The sportsman should therefore endeavour to get within range of one of these monster saurians when on shore. As they always keep within easy reach of the water, they are occasionally observed on the banks of the river by the traveller navigating the Nile, in which case they shonld be approached in a small boat as noiselessly as possible. Success is most likely to be achieved in cases where the haunt of the reptile is known, so that the sportsman may lie in ambush at some convenient spot in the vicinity. Unless, as rarely happens, the first bullet kills the animal on the spot, it generally contrives to find its way back to the water, and thus effects its escape.

Another saurian of great power, and extremely rapid in its movements, is the Monitor (Arab. waran), which attains a length of $4-5 \mathrm{ft}$., and derives its name from its supposed habit of giving warning of the approach of a crocodile.

1II. Other Mammalia and Birds. Although not indigenous to Egypt, several varieties of Apes, which are imported from the S. and W. provinces, are seen in the larger towns. Among these are the Cynocephalus hamadryas and C. anubis (both called kird by the Arabs), the Inuus ecaudatus (Arab. nisnâs), the Cercopithecus ruber, C. griseo-vividis, and, more rarely, the C. pyrihonotus.

The Nile Valley and the neighbouring desert hills are largely infested by Bats (Arab. walwat), The commonest kinds are the Kalong (Pteropus), the Long-eared Bat (Plecotus, Vesperlilio, Taphozous, Nyctinomus), and the Spectre Bat (Rhinolaphus, Nycteris, Rhinopoma).

Besides the beasts of prey already enumerated (p. 1xxxix), we may also mention the Mustela Africana, several kinds of Hedgehog (Evinaceus; Arab. ḳonfud), and the Shrew (Arab. umm ssîsi).

Egypt contains numerons species of the Rodentia. The fields, dwell-ing-houses, and sailing-vessels are often infested with Mice and Rats (Mus, Acomys), and in the Sinai Peninsula is found the Dormouse (Eliomys melanurus), all of which are called far by the Arabs. The Jumping Mouse (Dipus; Arab. yerbura) and the Sand Mouse (Meriones; Arab. gebeli) live in the desert, and the 'Fat Rat' (Psammomys obesus) in the sand-hills around Alexandria.

Besides the Birds indigenous to Egypt, there are, as already mentioned, a great number which winter there, while others merely pass through the country when on their way to other regions. Abont 360 different species have been ascertained to occur in Egypt, bnt we shall merely enumerate a few of the most important of those which remain permanently in the country.

The commonest Birds of Prey are the Golden Vulture (Gypaëtus meridionalis; Arab. big), the White-headed Vulture (Vultur fulvus; Arab. nisv), the Eared Vulture (V. auricularis), the Goose Vulture (V.cinereus), which, however, is a bird of passage only, the Carrion Vulture (Neophron percnoplerus; Arab. rakhameh), the Harrier (Milvus aegyptiacus; Arab. hedâyeh), and the Elanet (Elanus melanopterus). The white-tailed Sea Eagle (Haliaëtus albicilla; Arab. 'okâb, or shomêla) breeds in the Delta, the River Eagle (Pandion haliaëtus; Arab. mansar or Ketaf) on the cliffs of the Red Sea, the Dwarf Eagle (Aquila pennata) among the palm-groves of Lower Egypt, and the Lanner Falcon (Falco lanarius variet.; Arab. shâhin) and Falco barbar'us on the pyramids and rocky heights. Great nambers of 'Screaming Eagles' pass the winter in Egypt. Of rarer occurrence are the Imperial Eagle, the Hawk Eagle, the Migratory Falcon, the Stone and Red-footed Falcons, the white-tailed Buzzard, the Hawk, and the Sparrow-hawk (Arab. bâz). Several species of the European Har'rier are more common than tbese last. The Tower Falcon breeds in every
part of Egypt, and probably the Castrel Hawk (Falco cenchris) also. The Gabar' (Nisus gabar.) is said to be sometimes met with in Upper Egypt.

The commonest Owts are the snb-tropical Church Owl (Athene noctua var.; Arab. umm kêty) and the Eagle Owl (Bubo ascalaphus; Arab. bum, or $b a f a)$.

The family of Goatsuckers is represented in Egypt by the peculiar Caprimulgus aegyptiacus. A small Swift (Cypselus parvus), the chief representative of its family, frequents the regions planted with the dûm palm. The Swallows (khottaf, or 'asfur el-yenneh) most freqnently seen are the red-breasted Hirundo cahirica, which remains permanently in the country, and a kind of Rock Swallow (Cotile obsoleta).

Of the Fishing Birds the most common is the Kingfisher (Ceryle rudis), which frequents the banks of every part of the Nile.

The Bee Eater's are represented by the Merops apiaster, the M. aegyptiacus, and the M. viridissimus, all of which breed in Egypt; bnt the last only, which is called shehagh by the natives, and chiefly occurs in Central and Upper Egypt, remains thronghout the year.

The most numerous of the Thin-billed Birds are the Hoopoes (Arab. hudhud), and to the Promeropides belongs the pretty, lustrous Honeysucker (Nectarina metallica), which freqnents the frontiers of Upper Egypt.

Singing Birds ('asfur) are not numerons in Egypt, with the exception of numerous species of Larks and Stonechats. We may next mention the Drymoeca, or Drymoecus gracilis, the Cisticola cursitans, the Tree Nightingale (Aëdon galactodes), the Acrocephalus stentoreus, the African Waterwagtail (Motacilla vidua), the Wedgetail (Argia acaciae), and the Bulbul (Pycnonotus Arsinoë, found in the Fayûm and N.Nubia, while a second species, the $P$. xanthopygius occurs in Arabia Petræa and the valley of the Jordan).

There are no Flycatcher's peculiar to Egypt. Among the Butcher-birds we may mention the 'Masked Shrike' (Lanius nubicus), and among the Ravens (ghurab), the Short-tailed Raven (Corvus affinis). and the Desert Raven (C. umbrinus). The lofty mountains of the Sinai Peninsnla are the haunt of the Red-legged Crow (Fregilus graculus); and among the tamarisk bushes and on the rocky margins of the valleys of Arabia Petræa occurs the Starling (Amydrus Tristramii).

Among the Finches peculiar to Africa is the 'Desert Trumpeter' (Bucanetes githagineus). On the upper part of the Nile, beyond the Wâdi Healfa, occur several species of a more tropical character, such as the Fire-finch (Euplectes franciscana), the Steel-finch (Hypochera nitens), the 'Lancetail' (Oroloncha cantans), and the Dwarf Bloodfinch (Lagonosticta minima).

Woodpecker's are not met with on the Lower Nile. The Wryneck and grey Cuckoo occnr as birds of passage, and the Spurred Cuckoo (Centropus aegyptiacus; Arab. abu burbur) as a denizen of the Delta. The Jay (Coccystes glandarius) is more widely diffused throughont the country.

Among the native Running Birds we may mention the Desert Runner (Cursorius isabellinus), the Stone Curlew (Oedicnemus crepitans; Arab. kerwan), the Crocodile-Watcher (Pluvianus aegyptiacus; Arab. têr et-timsâa), and the sprightly Spurred Plover (Hoplopter•us spinosus; Arab. siksak). The commonest of the Herons are the 'Cono Heron' (Ardea Ibis; Arab. abu $k e r d a \hat{n}$ ) and the white 'Great Heron' (Ardea alba and Ardea garzetta). Near the Wâdi Halfa occurs the Abdim Stork (Ciconia Abdimii; Arab. sinbileh). To the family of the Ardeidae belong the rare Ibis Tantalus and the Sacred Ibis (Ibis aethiopica; Arab. narayeh herêz, or abu mingal).

Besides the Enropean aqnatic and other birds already enumerated, which freqnent the lagoons, lakes, and marshes (p. lxxx), we may also mention the Rose-backed Pelican (Pelecanus rufescens) of N.Nnbia; the curions Scissor-beak (Rhynchops flavirostris; Arab. abu mokas) and the Fox Goose (Chenalopex aegyptiacus; Arab. wuz), which are found thronghont the Whole of the Nile Valley, the former especially in summer; and the Broon Booby (Sula fiber; Arab. shomet), several pecaliar species of Gulls and Sea Swallows (Larrus leucophthalmus, Larus gelastes, Las us Hemprichii, Sterna media, Sterna Ber'gii, Sterna albigena, Sterna infuscata, and Anous stolidus), and the singnlar-looking Dromas (Arab. hankor'), on the shores

[^7]of the Red Sea. The Flamingo (Phoenicopterus antiquorum; Arab. bâsha rosh) haunts the Red Sea and the lagoons of the Delta throughout the whole year, usually congregating in enormous flights, and breeds in the region to the $E$. of Lake Menzâleh.
IV. Reptiles. Of this class of animals there are but few species peculiar to Egypt. The Salamanders and Batrachians (Arab. dufdara) are but scantily represented. There are aboat twenty species of Snakes (Arab. tarbdn), inclading the Horned Viper (Cerastes; Arab. mokdreneh) which appears in the ancient inscriptions as a hieroglyphic, the Eichis (Arab. ghar.âbeh or dashshâsha), the Cobra da Capello, Hooded, or Spectacle Snake (Naja Haje; Arab. nâsher), the Telescopus (Arab. abu 'ayan), the Psammophis (Arab. abu siydr), the Tropidonotus, the Periops (Arab. arkam), the Zamenis (Arab. gidari), and the Eryx (Arab. dassäs). The horned viper, the echis, and the hooded snake are highly venomous, and their bite is often fatal; the other snakes are not venomons, but their bite is sometimes dangerous. The Egyptian snake-charmers (Arab. hawi), all of whom belong to a gipsy tribe ( $g h a g a r$ ), usually exhibit a namber of cobras, the teeth in which the venom is secreted having been extracted (comp. p. xxvii).

To the order of the Saurians belong the Crocodile (Crocodilus vulgaris; Arab. timsah), of which there are several varieties, and the Monitor (Varanus niloticus; Arab. waran), both of which have been already mentioned (pp. lxyix, lxxx). Other species occarring in Egypt are the Ablepharus, the Gongylus, the Plestiodon, the Euprepes, the Scincus (Arab. sakankir), the Ophiops, the Eremias and Acanthodactylus (Arab. sehlityeh), the Psammosaur us griseus (Arab. waran, a name also applied to the monitor), the Ulomastix spinipes (Arab. dab), the Uromastix viridis, the Stellio vulgaris (Arab. hardan), several kinds of Agama, the Chameleon (Arab. herbayeh), and numerous Ascalabotes (Arab. abu bur's). To the Turtle Family belong the Nile Turtle (Trionyx aegyptiaca; Arab. tipsa) and a small Tortoise (Testudo marginata; Arab. zelhâfeh), while in the Red Sea occur six varieties of Chelonia (Arab. bisa or sakar'), several of which yield excellent tortoise-shell (Arab. bagha).
V. Fish of the Nile (by $D_{r}$. C. B. Klunzinger). The finny inhabitants of the Nile are in keeping with the palms growing on its banks, being of a tropical and African type. They are generally the same as those found in the Senegal and other African rivers, while European species are very rare. There are in all about $70-80$ varieties. The following sketch is merely desigued to afford an idea of the commonest species, particularly of those brought to market. Many of them are represented and described in the 'Description de l'Egypte' (p. ccxiv).

The fish of the Nile are most abundant during the time of the inundation, when a number of varieties, not fonnd at other seasons, are brought down from the higher regions to Lower Egypt. At these seasons the canals yield abnndant spoil, especially after the subsidence of the water. The flesh is generally soft, watery, and insipid, but the mode of cooking it is perhaps partly in fault. The colours are wanting in variety, white with a dark-coloured back predominating.

To the Perch Family (scaly fish with serrated head-bones) belongs the Keshr, and to the Carp Family (scaly fish without teeth) belong the Lebîs, or Debs, and the Binni, with a thorn in its dorsal fin. The various kinds of Siluridue are very abundant (fish without scales, with barbels, and generally with an adipose fin). Among these are the Shilbeh (a fish with a high neck, a short dorsal fin near the head, and without the adipose fin), which is of three kinds, the shilbeh 'arabi, the shilbeh sherifiyeh, and the shilbeh wudni (the first two with, the last without a spinous ray in its dorsal fin). The Shall, called kurkâr in Upper Egypt owing to the sound which they emit, is easily recognised by the bony armour covering its head and its fringed barbels. The varieties are the shal beledi, the shal senin or sheilan, and the shal kamari or batn sôda, the last of which has a blackish stomach. The shal karafsheh, or samr, has a layer of bone over its neck. The shal abu riyal more neariy resembles the following varieties. The Bayad and the Dokmak, provided with very long barbels, and generally of large size, are abundant. Another important
member of the Siluridæ is the long and large Karmat, with its long dorsal and posterior fins. The karmat haleh has an adipose fin, while the karmut 'arabi has none. To the same family belongs also the famous $R a^{\prime} \dot{d} d$, or electric eel (with one adipose fin on its back, and black spots on its skin).

The following families are peculiar to the tropics. The Characini (salmon of the Nile) are scaly and provided with an adipose fin. Among these are the high-backed and almost rhombic $K a m r$ el-Bahr; the oblong Ray, with its small and somewhat flat teeth; the Roshal, or Kelb el-Bahr. (river-dog), with strong, conical teeth protruding from its mouth; and the Nefash, with its small, narrow, and closely-set teeth with double points, and somewhat high shoulders. To the family of the Chromides (scaly fish with spinous fins and sides of irregular shape) belongs the Bolti.

A family occurring in Africa only is that of the Mormyvides, or scaly fish with remarkably small mouths, and heads covered with a thick and bare skin. Among the members of this family is the well-known Mormyrus oxyrvhynchus (Kanama, or Khashm el-Banat), with its long snout turned downwards, which was so frequently represented by the ancient Egyptians; then the blunt-mouthed Banes, including the Kashua and Kashua kamara, or 'Er'sat el-Bahr', the last of which has an almost square $\dot{\text { muzzle. }}$

An interesting, but not common, fish is the Finny Pike (Polypterus; Arab. abu bishî), with its numerous dorsal fins and rhomboidal scales covered with enamel, forming one of the few surviving members of the abundant antediluvian Ganoids. The Ball Fish (Tetrodon; Arab. fakaka), which is not an edible variety, is frequently offered for sale, either fresh or stuffed, on account of its curious shape and its singular faculty of puffing itself out like a bladder. It differs from the common ball-fish of the Red Sea in having seven brown or blackish oblique stripes on its sides. The Red Sea contains many fish of a similar kind, but they are not known to exist in the Mediterranean. From the latter sea the Harder (Mugil), Bari, or Ghar ana, frequently ascend the Nile, where they form the herrings of the Arabs (fesikh). The same remark applies to the 'Finte' (sabagha), a fish resembling the herring, which occurs in many of the seas, rivers, and lakes of Europe. The Eel of the Nile ( $t a^{\prime} b a n$ el-bahr.) does not differ from that of European waters.
VI. Insects. Butterffies are very rare in Egypt, but Moths are much more numerous. Among the not very numerons Beetles we may mention the Ateuchus sacer, the celebrated Scarabæus (p. cxlvii) of the ancient Egyptians. This sacred beetle was believed to be of the male sex only, and its act of rolling the clayballs containing its eggs was supposed to be its manner of propagating its species (Plutarch de Iside, 1. x. 74). The Egyptians accordingly consecrated the scarabæus to Ptah, the god of origin and creation, who is often represented on the monuments with a scarabæus in place of a human head. Among other varieties occur the Buprestis, the Cicindela or sand-beetle, the Hister, the Dermestes, and numerous Water Beetles.

The various kinds of Wasps in Egypt attain a very large size. Bees are not often kept by the natives. The so-called black houey eaten by the lower classes is sugar-cane treacle. The white honey, which is the genuine produce of bees, is imported from Arabia.

The commonest of the Orthoptera are Grasshopper's and Cockroaches; and of the Neuroptera we may mention the Ephemera or day-flies, the beautiful and often reddish-coloured Dragon-fly, and the White Ant (rare). Among the Diptera are the troublesome House-fly, and the Mosquito. Vermin of all kinds abound, such as Fleas, Bugs, Lice, Scorpions, Tarantulas, and Centipedes.

# III. Doctrines of El-Islâm. 

## Manners and Customs and Religious and Popular Festivals of the Mohammedans. (By Prof. Socin.)

El-Islâm is the most widely spread religion in the world, and has not yet ceased to spread.

Mohammed $t$, as a religious teacher, took up a position hostile to the 'age of ignorance and folly', as he called heathenism. The revelation which he believed it was his mission to impart was, as he declared, nothing new. His religion was of the most remote antiquity, all men being supposed by him to be born Muslims, though surrounding circumstances might subsequently cause them to fall away from the true religion. Even in the Jewish and Christian scriptures (the Thorah, Psalms, and Gospels), he maintained, there were passages referring to himself and El-Islâm, but these passages had been suppressed, altered, or misinterpreted. So far as Mohammed was acquainted with Judaism and Christianity, he disapproved of the rigour of their ethics, which were apt to

[^8]degenerate into a body of mere empty forms, while he also rejected their dogmatic teaching as utterly false. Above all he repudiated whatever seemed to him to savour of polytheism, including the doctrine of the Trinity, as 'assigning partners' to the one and only God. Every human being he considered bound to accept the new revelation of El-Islâm, and every Muslim is bound to promulgate this faith. Practically, however, this stringency was afterwards relaxed, as the Muslims found themselves obliged to enter into paciffc treaties with nations beyond the confines of Arabia. A distinction was also drawn between peoples who were already in possession of a revelation, such as Jews, Christians, and Sabians, and idolaters, the last of whom were to be rigorously persecuted.

The Muslim creed is embodied in the words: 'There is no God but God (Allâh $\dagger$ ), and Mohammed is the prophet of God' (lâ ilâha ill' Allâh, wa Muhammedu-rrasûl-Allâh). This formula, however, contains the most important doctrine only; for the Muslim is bound to believe in three cardinal points: (1) God and the angels, (2) written revelation and the prophets, and (3) the resurrection, judgment, eternal life, and predestination.
(1). God and the Angels. According to comparatively modern inscriptious it would appear that the emphatic assertion of the unity of God is by no means peculiar to Mohammedanism. As God is a Spirit, embracing all perfection within Himself (comp. p. 66), ninety - nine of his different attributes were afterwards gathered from the Korân, each of which is represented by a bead of the Muslim rosary. Great importance is also attached to the fact that the creation of the world was effected by a simple effort of the divine will. (God said 'Let there be', and there was.)

The story of the creation in the Korân is taken from the Bible, with variations from Rabbinical, Persian, and other sources. God first created his throne; beneath the throne there was water; the earth was then formed. In order to keep the earth steady, God caused it to be supported by an angel, placed on a huge rock, which in its turn rests on the back and horns of the bull of the world. And thus the earth is kept in its proper position.

Simultaneous with the creation of the firmament was that of the Ginn (demons), beings occupying a middle rank between men and angels, some of them believing, others unbelieving. These ginn are frequently mentioned in the Korân, and at a later period numerous fables regarding them were invented. To this day the belief in them is very general. When the ginu became arrogant, an angel was ordered to banish them, and he accordingly drove them to the mountains of Kâf by which the earth is surrounded, whence they occasionally make incursions. Adam was then created, on the

[^9]evening of the sixth day, and the Muslims on that account observe Friday as their Sabbath. After the creation of Adam came the fall of the angel who conquered the ginn. As he refused to bow down before Adam he was exiled, and thenceforward called Iblîs, or the devil. After this, Adam himself fell, and became a solitary wanderer, but was afterwards re-united to Eve at Mecca, where the sacred stone in the $\mathrm{Ka}^{r}$ ba derives its black colour from Adam's tears. At Jidda, the harbour of Mecca, the tomb of Eve is pointed out to this day. Adam is regarded as the first orthodox Muslim; for God, from the earliest period, provided for a revelation.

Besides the creative activity of God, his maintaining power is specially emphasised, as being constantly employed for the preservation of the world. His instruments for this purpose are the angels. They are the bearers of God's throne, and execute his commands. They also act as mediators between God and men, being the constant attendants of the latter. When a Muslim prays (which he does after the supposed fashion of the angels in heaven), it will be observed that he turns his face at the conclusion first over his right and then over his left shoulder. He thereby greets the recording angels who stand on each side of every believer, one on the right to record his good, and one on the left to record his evil deeds. The traveller will also observe the two stones placed over every grave in a Muslim burial-ground. By these sit the two angels who examine the deceased, and in order that the creed may not escape his memory it is incessantly chanted by the conductor of the funeral.

While there are legions of good angels, who differ in form, but are purely ethereal in substance, there are also innumerable satellites of Satan, who seduce men to error and teach them sorcery. They endeavour to pry into the secrets of heaven, to prevent which they are pelted with falling stars by the good angels. (This last is a notion of very great antiquity.)
(2). Writtien Revblation and the Prophbts. The earliest men were all believers, but they afterwards fell away from the true faith. A revelation therefore became necessary, and it is attained partly by meditation, and partly by direct communication. The prophets are very numerous, amounting in all, it is said, to 124,000 ; but their ranks are very various. Some of them have been sent to found new forms of religion, others to maintain those already existing. The prophets are free from all gross sins; and they are endowed by God with power to work miracles, which power forms their credentials; nevertheless they are generally derided and disbelieved. The greater prophets are Adam, Noah, Abraham, Jesus, and Mohammed.

Adam is regarded as a pattern of human perfection, and is therefore called the 'representative of God'. - Noah's history is told more than once in the Korân, where it is embellished with
various additions, such as that he had a fourth, but disobedient son. The preaching of Noah and the occurrence of the Deluge are circumstantially recorded. The ark is said to have rested on Mt. Jûdi, near Mossul. The giant ' Uj, son of 'Enak, survived the flood. He was of fabulous size, and traditions regarding him are still popularly current.

Abraham (Ibrâhîm) is spoken of by Mohammed as a personage of the utmost importance, and in the Korân, as well as in the Bible he is styled the 'friend of God' (comp. James ii. 23). Mohammed professed to teach the 'religion of Abraham', and he attached special importance to that patriarch as having been the progenitor of the Arabs through Ishmael. Abraham was therefore represented as having built the Ka'ba, where his footprints are still shown. One of the most striking passages in the Korân is in Sûreh vi. 76, where Abraham is represented as first acquiring a knowledge of the one true God. His father was a heathen, and Nimrod at the time of Abraham's birth had ordered all new-born children to be slain (a legend obviously borrowed from the Slaughter of the Innocents at Bethlehem) ; Abraham was therefore brought up in a cavern, which he quitted for the first time in his fifteenth year. 'And when night overshadowed him he beheld a star, and said - This is my Lord; but when it set, he said - I love not those who disappear. And when he saw the moon rise, he said again - This is my Lord; but when he saw it set, he exclaimed - Surely my Lord has not guided me hitherto that I might go astray with erring men. Now when he saw the sun rise, he spake again - That is my Lord; he is greater. But when it likewise set, he exclaimed - O people, I will have nothing to do with what ye idolatrously worship; for I turn my face steadfastly towards Him who created heaven and earth out of nothing; and I belong not to those who assign Him partners!'

Besides the slightly altered Bible narratives, we find a story of Abraham having been cast into a furnace by Nimrod for having destroyed idols, and having escaped unhurt (probably borrowed from the miracle of the three men in the fiery furnace).

The history of Moses, as given in the Korân, presents no features of special interest. He is called the 'speaker of God'; be wrote the Thorah, and is very frequently mentioned. - In the story of Jesus Mohammed has perpetrated an absurd anachronism, Mary being confounded with Miriam, the sister of Moses. Jesus is called 'Isâ in the Korân; but 'Isâ is properly Esau, a name of reproach among the Jews; and this affords us an indication of the source whence Mohammed derived most of his information. On the other hand, Jesus is styled the 'Word of God', as in the Gospel of St. John. A parallel is also drawn in the Korân between the creation of Adam and the nativity of Christ; like Adam, Jesus is said to have been a prophet from childhood, and to have wrought miracles
which surpassed those of all other prophets, including even Mohammed himself. He proclaimed the Gospel, and thus confirmed the Thorah; but in certain particulars the latter was abrogated by him. Another was crucifled in his stead, but God caused Jesus also to die for a few hours before taking him up into heaven.

Modern investigation shows with increasing clearness how little originality these stories possess, and how Mohammed merely repeated what he had learned from very mixed sources (first Jewish, and afterwards Christian also), sometimes entirely misunderstanding the information thus acquired. The same is the case with the numerous narratives about other so-called prophets. Even Alexander the Great is raised to the rank of a prophet, and his campaign in India is represented as having been undertaken in the interests of monotheism. Alexander is also associated with the Khidr, or animating power of nature, which is sometimes identified with Elijah and St. George. The only other matter of interest connected with Mohammed's religious system is the position which he himself occupies in it. Moses and Christ prophesied his advent, but the passages concerning him in the Thorah and Gospels have been suppressed. He is the promised Paraclete, the Comforter (St. John xiv. 16), the last and greatest of the prophets; but he does not profess to be entirely free from minor sins. He confirms previous revelations, but his appearance has superseded them. His whole doctrine is a miracle, and it therefore does not require to be confirmed by special miracles. After his death, however, a number of miracles were attributed to him, and although he was not exactly deified, the position assigned to him is that of the principal mediator between God and man. The apotheosis of himan beings is, moreover, an idea foreign to the Semitic mind, and it was the Persians who first elevated 'Ali and the imâms (literally reciters of prayers) who succeeded him to the rank of supernatural beings.

The Korẫ itself was early believed to be of entirely supernatural origin. The name signifies 'rehearsal', or 'reading', and the book is divided into parts called Sûrehs. The first revelation vouchsafed to the Prophet took place in the 'blessed night' in the year 609. With many interruptions, the 'sending down' of the Korân extended over twenty-three years, until the whole book, which had already existed on 'well-preserved tables' in heaven, was in the prophet's possession. During the time of the 'Abbaside khalifs it was a matter of the keenest controversy whether the Korân was created or uncreated. (The Oriental Christians have likewise al ways manifested a great taste for subtle dogmatic questions, such as the Procession of the Holy Ghost.) The earlier, or Meccan Sûrehs, which on account of their brevity are placed at the end of the book, are characterised by great freshness and vigour of style. They are in rhyme, but only partially poetic in form. In the longer Sûrehs of a later period the style is more studied and the narrative often
tedious. The Korân is nevertheless regarded as the greatest masterpiece of Arabic literature. The prayers of the Muslims consist almost cxclusively of passages from this work, although they are entirely ignorant of its real meaning. Even by the early commentators much of the Korân was imperfectly understood, for Mohammed, although extremely proud of his 'Arabic Book', was very partial to the use of all kinds of foreign words. The translation of the Korân being prohibited, Persian, Turkish, and Indian children learn it entirely by rote.

The Korân has been translated into English, French, German, Italian, and Latin. The best English translations are those of Sale (1734; with a 'preliminary discourse' and copious notes; ed. by Rev. E. M. Wherry, 1882-86, 4 vols.; and also published in a cheap form by Messrs Warne \& Co., London) ; Rodwell (London, 1861; 2nd ed., 1878); and Palmer (London, 1880).
(3). Future State and Predestination. The doctrine of the resurrection has been grossly corrupted by the Koràn and by subsequent tradition; but its main features have doubtless been borrowed from the Christians, as has also the appearance of Antichrist, and the part to be played by Christ at the Last Day. On that day Christ will establish El-Islâm as the religion of the world. With him will re-appear El-Mahdi, the twelfth Imâm (p. xcvii), and the beast of the earth (p. lixxy), while the peoples of Gog and Magog will burst the barrier beyond which they were banished by Alexander the Great (p. lxxxviii). The end of all things will be ushered in by the trumpet-blasts of the angel Asrâfîl ; the first of these blasts will kill every living being; a second will awaken the dead. Then follows the Judgment; the righteous cross to Paradise by a bridge of a hair's breadth, while the wicked fall from the bridge into the abyss of hell. Some Muslims believe in a kind of limbo, like that of the Hebrews and Greeks, while others maintain that the souls of the dead proceed directly to the gates of Paradise. At the Judgment every man is judged according to the books of the recording angels (p. lxxxvi). The good have the book placed in their right hands, but it is placed in the left hands of the wicked, bound behind their backs. The scales in which good and evil deeds are weighed play an important part in deciding the soul's fate, a detail which gave rise to the subsequent doctrine of the efficacy of works. This doctrine is carried so far that works of supererogation are believed to be placed to the credit of the believer. The demons and animals, too, must be judged. Hell, as well as heaven, has different regions; and El-Islâm also assumes the existence of a purgatory, from which release is possible. Paradise is depicted by Mohammed, in consonance with his thoroughly sensual character, as a place of entirely material delights.

The course of all events, including the salvation or perdition of every individual, is, according to the strict interpretation of the Korân, absolutely predestined; although several later sects have endeavoured to modify this terrible doctrine. It is these views,
however, which give rise to the pride of the Maslims. By virtue of their faith they regard themselves as certainly elect, and as a rule they make no attempt to convert others, as they have no power to alter the irrevocable decrees of God.

In the second place the Korân is considered to contain, not only a standard of ethics, but also the foundation of a complete code of law.

The Morality of El-Islâm was specially adapted by its founder to the character of the Arabs. Of duties to one's neighbour, charity is the most highly praised, and instances of its practice are not unfrequent. Hospitality is much practised by the Beduins, and by the peasantry also in those districts which are not overrun with travellers. Frugality is another virtue of the Arabs, though too apt with them to degenerate into avarice and cupidity. The law of debtor and creditor is lenient. Lending money at interest is forbidden by the Korân, but is nevertheless largely practised, the lowest rate in Syria being 12 per cent. The prohibition against eating unclean animals, such as swine, is older than El-Islâm. It is impossible to decide whether the prohibition of intoxicating drinks is due to the prevalence of habits of over-indulgence, such as are depicted by the poets before Mohammed's time, or is based on sanitary considerations. Wine, however, and even brandy, are largely consumed by the upper classes, especially among the Turks.

Although Polygamy is sanctioned, every Muslim being permitted to have four wives at a time, yet among the bulk of the population monogamy is far more frequent, owing to the difficulty of providing for several wives and families at once. The wives, moreover, are very apt to quarrel, to the utter destraction of domestic peace, unless the husband can afford to assign them separate houses. Few men remain unmarried. The treatment of women as mere chattels, which is of very remote Oriental origin, constitutes the greatest defect of the system of El-Islàm, although the position of the female sex among the Oriental Christians and Jews is little better than among the Muslims. It is probably owing to this low estimate of women that the Muslims generally dislike to see them praying or occupying themselves with religion. The practice of wearing veils is not confined to the Muslim women, but is universal in the East. An Oriental lady would, indeed, regard it as an affront to be permitted to mingle in society with the same freedom as European ladies. Even in the Christian churches, the place for women is often separated from the men's seats by a railing. The peasant and Beduin women, on the other hand, are often seen unveiled. The ease with which El-Islâm permits divorce is due to Mohammed's personal proclivities. A single word from the husband suffices to banish the wife from his house, but she retains the marriage-portion which she has received from her husband. The children are brought
ap in great subjection to their parents, often showing more fear than love for them.

The repetition of Praybrs five times daily forms one of the chief occupations of faithful Muslims. The hours of prayer (adân) are proclaimed by the mueddins (or muezzins) from the minarets of the mosques: (1) Maghrib, a little after sunset; (2) 'Ash $\hat{a}$, nightfall, about $1 \frac{1}{2}$ hour after sunset; (3) Subh, daybreak; (4) $D u h r$, midday; (5) 'Asr, afternoon, about $1 \frac{1}{2}$ hour before sunset. These periods of prayer also serve to mark the divisions of the day. The day is also divided into two periods of 12 hours each, beginning from sunset, so that where clocks and watches are used they require to be set daily. Most people however content themselves with the sonorous call of the mueddin : Allâhu akbar (three times); ashhadu an lâ ilâha ill' Allâh; ashhadu anna Muhammeda rrasûlu'llâ̂h (twice); heyya 'ala-ṣsalâh (twice); heyya 'ala'l-falâh (twice),


Allâhu akbar (twice), lâ ilâha ill'allâh; i.e. 'Allâh is great; I testify that there is no God but Allâh, and Mohammed is the prophet of Allâh; come to prayer; come to worship; Allâh is great; there is no God but Allâh'. This call to prayer sometimes also reverberates thrillingly through the stillness of night, to incite to devotion the faithful who are still awake. - The duty of washing before prayer is a sanitary institution, and tanks are provided for the purpose in the court of every mosque. In the desert, where water is scarce and precious, the faithful are permitted to use sand for this religious ablution.

The person praying must remove his shoes or sandals and turn his face towards Mecca, as the Jews and some of the Christian sects turn towards Jerusalem or towards the East. The worshipper begins
by putting his hands to the lobes of his ears, and then holds them a little below his girdle; and he intersperses his recitations from the Korân with certain prostrations performed in a given order. On Fridays the midday recital of prayer takes place three quarters of an hour earlier than usual, and is followed by a sermon, preached from the Mimbar (p. oxcviii) by a respectable, but unlearned layman, whose audience sits on the ground in rows before him. Friday is not, however, regarded as a day of rest, business being transacted as on other days. It has, however, of late become customary to close the courts of justice in imitation of the Christian practice of keeping Sunday. - The Muslims frequently recite as a prayer the first Sûreh of the Korân, one of the shortest, which is used as we employ the Lord's prayer. It is called el-fâtha ('the commencing'), and is to the following effect : - 'In the name of God, the merciful and gracious. Praise be to God, the Lord of creatures, the merciful and gracious, the Prince of the day of judgment; we serve Thee, and we pray to Thee for help; lead us in the right way of those to whom thou hast shown mercy, upon whom no wrath resteth, and who go not astray. Amen'.

Another important duty of the believer is to observe the Fast of the month Ramadân. From daybreak to sunset throughout the month eating and drinking are absolutely prohibited, and the devout even scrupulously avoid swallowing their saliva. The fast is for the most part rigorously observed, but prolonged repasts during the night afford some compensation. Many shops and offices are entirely closed during this month. As the Arabic year is Iunar, and therefore eleven days shorter than ours, the fast of Ramaḍàn runs through all the seasons in the course of thirty-three years, and its observance is most severely felt in summer, when much suffering is caused by thirst.

The Pilgrimage to Micca, which every Muslim is bound to undertake once in his life, is also deserving of mention. Most of the pilgrims now perform the greater part of the distance by water. On approaching Mecca the pilgrims undress, laying aside even their headgear, and put on aprons and a piece of cloth over the left shoulder. They then perform the circuit of the $\mathrm{Ka}^{\prime} \mathrm{ba}$, kiss the black stone, hear the sermon on Mt. 'Arafàt near Mecca, pelt Satan with stones in the valley of Mina, and conclude their pilgrimage with a great sacrificial feast. On the day when this takes place at Mecca, sheep are slaughtered and a festival called the Great Beiram (el-îd el-kebir) observed throughout'the whole of the Mohammedan countries. (The 'Lesser Beiram', Arab. el-'̂̀d es-sughayyir, follows Ramadân.) The month of the pilgrimage is called Dhulhiggeh (that 'of the pilgrimage'), and forms the close of the Muslim year. $t$ The conduct of the caravan, with the gifts presented to the

[^10]town of Mecca, the escort, and otheritems, costs the Egyptian government 13,000 purses (about 66,300l.) annually. For an account of the feast in connection with the pilgrimage, see p. c.

Most of the Arabic Literature is connected with the Korân. Commentaries were written at an early period to explain the obscure passages in it, and there gradually sprang up a series of exegetical writings dwelling with elaborate minuteness upon every possible shade of interpretation. Grammar, too, was at first studied solely in connection with the Korân, and a prodigious mass of legal literature was founded exclusively upon the sacred volume. Of late years, however, some attempts have been made to supersede the ancient law, and to introduce a modern European system. The Beduins still have their peculiar customary law.

With regard to theological, legal, and still more to ritualistic questions, El-Islâm has not always been free from dissension. There are in the first place four Orthodox sects, the Hanefites, the Shâfe'ites, the Malekites, and the Hambalites, who are named after their respective founders. In addition to these must be mentioned the schools of Free Thinkers, who sprang up at an early period, partly owing to the influence of Greek philosophy. The orthodox party, however, triumphed, not only over these heretics, but also in its struggle against the voluptuousness and luxury of the most glorious period of the khalifs.

Ascetism and fanaticism were also largely developed among professors of El-Islâm, and another phase of religious thought was pure Mrsticism, which arose chiefly in Persia. The mystics (guf) interpret many texts of the Korân allegorically, and their system therefore frequently degenerated into Pantheism. It was by mystics who still remained within the pale of El-Islâm (such as the famous Ibn el-'Arabi, born in 1164) that the Orders of Dervishes were founded.

Dervishes (darwîsh, plur. darâwîsh). The love of mysticism which characterises Mohammedans is due partly to the nature of El-Islàm itself, and partly to external circumstances. That earthly life is worthless, that it is a delusion, and at best a period of probation, are sentiments of frequeut recurrence in the Korân. This

[^11]pessimist view of life has been confirmed by Mohammed's conception of the Supreme Being, on whose awe-inspiring attributes he has chiefly dwelt, thus filling his adherents with a profound dread of their Creator. The result of this doctrine was to induce devout persons to retire altogether from the wicked world, the scene of vanity and disappointment, and to devote themselves to the practice of ascetic exercises, with a view to ensure their happiness in a future state. The fundamental aim of this asceticism was to strive after a knowledge of God by cultivating a kind of half-conscious and ecstatic exaltation of mind. A mystic love of God was deemed the great passport which enabled the worshipper to fall into this ecstatic trance, and to lose himself so completely in contemplation as to destroy his own individuality ( $f a n \hat{a}$ ) and blend it with that of the Deity (ittihâd). As in Europe the monastic system and the mendicant orders sprang from the example of penitents and hermits who had renounced the world, so in the Mohammedan world asceticism was rapidly developed into an organised system of mendicancy, although in the Korẫn Moḥammed had expressed his strong disapproval of the Christian monastic system. At an early period many noble thinkers (such as the Persians Sa'di and Hâfiz) and talented poets enrolled themselves in the ranks of the ascetics, but the dervishes of the present day have entirely lost the spirit of their prototypes, and have retained nothing but the mere physical capacity for throwing themselves into a mechanical state of ecstasy and rendering themselves proof against external sensations.

The following are the principal orders of dervishes (tarikat ed-darawish) in Egypt: -
(1) The Rifâtiyeh (sing. rifáti), an order founded by Seyyid Ahmed Rifâ’a el-Kebîr, possess a monastery near the mosque of Sultân Hiasan (see p. 52), and are recognisable by their black flags and black or dark blue turbans. The best-known sects of this order are the Aulad 'Ilwadn, or 'Tluwaniyeh Dervishes, and the Sardîyeh Dervishes. The former are noted for their extraordinary performances at festivals, such as thrusting iron nails into their eyes and arms, breaking large stones against their chests, as they lie on their backs on the groand, and swallowing burning charcoal and fragments of glass. The Sardiyeh, who usually carry green flags, are snake-charmers (p. xxvii), and on the Friday on which the birthday of the prophet is celebrated used to allow their shêkh to ride over them on horseback (the doseh; p. ci).
(2) The Kadirîyeh (sing. kadiri), an order founded by the celebrated Seyyid ‘Abd el-̣âdir el-Gîlâni, have white banners and white turbans. Most of them spend their time in fishing, and in their processions they carry nets of different colours, fishing-rods, and other insignia of their chief pursuit.
(3) The Ahmedîyeh (sing. ahmedi), the order of Seyyid Ahmed elBedawi, are recognised by their red banners and red turbans. This order is very numerous and is much respected. It is divided into many sects, bnt of these the two most important only need be mentioned. One of these is the Shinnawiyeh, who play an important part in the ceremonies at the tomb of Seyyid Ahmed at Tranta (p. 24). The other sect is that of the Auld d Nah, who are generally young men, wearing high pointed caps with a plnme of strips of coloured cloth, and a number of small balls strung across their breasts, and carrying wooden swords and a kind of whip made of a thick plait of rope.

There are also many other orders which it is unnecessary to enumerate. The ceremony of the admission of memhers to all these orders is a very simple matter. The candidate (el-murid) performs the customary ablutions, sits down on the ground heside the superior (el-murshid, or spiritual, leader), gives him his hand, and repeats after him a set form of words, in which he expresses penitence for his sins and his determination to reform, and calls Allâh to witness that he will never quit the order. The ceremony terminates with three recitals of the confession of faith by the murîd, the joint repetition of the fatha ( p . xci), and a kissing of hands.

The religions exercises of all the dervishes consist chiefly in the performance of Zikrs (i.e. pious devotions, or invocations of Allâh; see below). Almost all the dervishes in Egypt are small tradesmen, artizans, or peasants. Most of them are married men, and they take part in the ceremonies pecnliar to their order at stated seasons only. Some of them, however, make it their business to attend festivals and funerals for the purpose of exhibiting their zikrs. These last are called fukara (sing. fakîr), i. e. 'poor men'. Others again support themselves by drawing water (hemali; see p. 41). Those who lead a vagrant life and subsist on alms are comparatively few in nnmher. The dervishes of this class


Dancing Dervishes.
usually wear a kind of gown (dilk) composed of shreds of rags of varions colonrs sewn together, or a shaggy coat of skins, and carry a stick with strips of cloth of various colours attached to the upper end. A considerahle number of them are insane, in which case they are highly revered by the people, and are regarded as specially favoured by God, who has taken their spirits to heaven, while he has left their earthly tabernacle behind.

The Zikrs (see above) to which the traveller will most conveniently ohtain access are those of the Dancing and the Howling Dervishes.

The dancing dervishes are called Molawis after the founder of their order, the Mola Jelal ed-dîn er-Rami of Balkh in Persia (who flourished ahont A.D. 1208), mevlewi being the Tarkish form for môlawi, or adherent of the Môla or learned master. They perform their zikr within a circular space ahout 20 ft . in diameter and enclosed hy a railing. At Cairo the Zikr usually takes place on Frid. (2-3p.m.), at the Tekkîyeh el-Môlawîyeh, to the S.W. of the Place Sultan H san (Pl. D, 6). With slow, measured tread the shékh comes forward, followed by a dervish, and takes his seat on a carpet
opposite the entrance. The other dervishes next enter the circle one after another, in the order of their ages, wearing long gowns and conical hats. They walk solemnly up to their superior, make him a profound oheisance, kiss the hem of his robe, and take op their position to his left. From the galleries is presently heard a rude and weird kind of music, consisting of a single prolonged tone of a stringed instrument accompanied by a flute and a human voice rising and falling in cadences. Time is beaten by a tambourine, with varying rapidity and vigour. The singer recites a hymn expressing the most ardent love of God. As soon as the singing ceases, the dervishes rise, and walk in procession three times round the circle, headed by the shêkh. Each of them, including the shêkh himself, makes a low bow in passing the spot from which the shêkh has just risen. They then resume their seats, and the shêkh, with closed eyes, and in a deep, sepulchral voice, begins to murmur a prayer, in which the word Allâh alone is audible. When the prayer is over the dervishes divest themselves of their gowns, under which they wear a long, loose, lightcoloured skirt or kilt, reaching down to their ankles, and a more closely fitting vest. They then present themselves before the shêkh, each in his tnrn, make him a profound obeisance, and begin to move slowly round in a circle. They turn on the left foot, propelling themselves by touching the waxed floor from time to time with the right. Most of them make about forty gyrations per minate, but some of them accomplish sixty and even more. The whole of the zikr is performed by the dervishes noiselessly, with closed eyes, and outstretched arms, the palm of one hand being turned apwards and the other downwards, and their heads either thrown back or leaning on one side. During the dance soft strains of music are heard, while the beat of the tambouriue gradually accelerates, and the skirts of the performers fly out in a wide circle. The tones of the flute become shriller and shriller, until on a signal given by the shêkh the music ceases, the dancers stop, cross their arms over their chests, and resume their seats. The dance is performed three times by all except the superior. The latter, however, walks several times noiselessly through the midst of the dancers, who, although their eyes are closed, touch neither him nor one another. The whole zikr occupies ahout an hour.

The howling or shouting dervishes perform their zikr at Cairo on Frid. (1.30-2.30 p.m.) in the little mosque beside the Kasr el-'Ain (p. 47); an early start is necessary to secure a seat (1-2 pias.). The dervishes assume a kneeling or crouching posture, with their heads and chests bent downwards. In this attitude they sometimes remain for hours, incessantly shouting the Muslim confession of faith - 'lâ ilâha', etc., until they at length attain the ecstatic condition, and finish by repeating the word ha, i.e. 'he' (God) alone. On the occasion of great festivals some of them fall into a kind of epileptic convulsion, and foam at the mouth; but no notice is taken of them, and they are left to recover without assistance. It need hardly be added that the European traveller will find these performances unpleasing and painful.

The Worship of Saints and Martyrs was inculcated in connection with El-Islàm at an early period. The faithful undertook pilgrimages to the graves of the departed in the belief that death did not interrupt the possibility of communication with them. Thus the tomb of Mohammed at Medîna, and that of his grandson Husên at Kerbela, became particularly famous, and every little town soon boasted of the tomb of its particular saint. In many of the villages of Syria the traveller will observe small domecovered buildings, with grated windows, and surmounted by the crescent. These are the so-called Weli's, mausolea of saints, or tombs of shêkhs. In the interior there is usually a block of stone, hewn in the shape of a sarcophagus and covered with a green or
red cloth, on which texts from the Korân are embroidered in gold or silver. The walls are generally embellished with paintings representing the sacred cities of El-Islâm, and executed in an amusingly primitive style. Suspended from the ceiling by cords and threads are little boats, ostrich eggs, and numerous paper bags filled with sacred earth from Mecca. In one corner are a thick wax candle and a heap of bones of all kinds. The tomb is usually surrounded by a burial-ground, where certain persons have the privilege of being interred. Schools are also frequently connected with these weli's. Shreds of cloth are often seen suspended from the railings of these tombs, or on certain trees which are considered sacred, having been placed there by devout persons. This curious custom is of ancient origin.

About the end of the 18th century a reaction against the abuses of El-Islâm sprang up in Central Arabia. The Wahhabites, or Wahhabees, named after their founder 'Abd el-Wahhâb, endeavoured to restore the religion to its original purity; they destroyed all tombs of saints, including even those of Mohammed and Hû̂sên, as objects of superstitious reverence, and sought to restore the primitive simplicity of the prophet's code of morals; and they even forbade the smoking of tobacco as being intoxicating. They soon became a great political power, and had not Mohammed 'Ali deemed it his interest to suppress them, their influence would have been far more widely extended than it now is. - As to the Senûsi order, see p. lxvi.

We have hitherto spoken of the doctrines of the Sunnites (from sunna, 'tradition'), who form one great sect of El-Islâm. At an early period the Shí'tres (from shî $a$, 'sect') seceded from the Sunnites. They assigned to Ali, the son-in-law of Mohammed, a rank equal or even superior to that of the prophet himself; they regarded him as an incarnation of the Deity, and believed in the divine mission of the imâms descended from him. El-Mahdi, the last of these, is believed by them not to have died, but to be awaiting in concealment the coming of the last day. The Persians are all Shî́ites. Towards the West also Shî́itism was widely disseminated at an early period, particularly in Egypt under the régime of the Fâțimite sovereigns. The Shî́ites are extremely fanatical, refusing even to eat in the society of persons of a different creed. The other sects, which are chiefly confined to Syria (the Metâwileh, the Isma'ilîyeh, the Nosairîyeh, the Druses, etc.), are noticed in Baedeker's Syria and Palestine.

## Remarks on Mohammedan Customs.

The birth of a child is celebrated on the seventh day of its life by a domestic festival, attended by the kâḍi or some learned theologian, who dissolves in his mouth a piece of sugar-candy presented Baedeker's Egypt I. 3rd Ed.
to him by the host and drops a little of his sweetened saliva into the infant's mouth, as if to give it a sweet foretaste of the world's gifts, and also for the purpose of 'giving it a name out of his mouth'. Muslims, it is well known, are usually named by their pronomens only. If a more precise designation is desired, the name of the father is placed after the pronomen, with or without the word $i b n$ ('son of') placed between the names. Nicknames, such as 'the oneeyed', etc., are also not uncommon.

When the child is forty days old the mother takes it to the bath, and causes forty bowls of water (thirty-nine in the case of a girl) to be poured over its head. This bath forms the purification of both mother and child.

The rite of circumcision is performed on boys up to the age of six or seven, or even later, the ceremony being attended with great pomp. The child is previously conducted through the streets in holiday attire, the procession being frequently united with some bridal party, in order to diminish the expense of the proceedings. The boy generally wears a turban of red cashmere, girls' clothes of the richest possible description, and conspicuous female ornaments, which are designed to attract attention, and thus avert the evil eye from his person. A handsomely caparisoned horse is borrowed to carry him; he half covers his face with an embroidered handkerchief; and the barber who performs the operation and a noisy troop of musicians head the procession. The first personage in the procession is usually the barber's boy, carrying the 'heml', or barber's sign, a kind of cupboard made of wood, in the form of a half-cylinder, with four short legs. The flat front of the heml is adorned with pieces of looking-glass and embossed brass, while the back is covered with a curtain. Two or more boys are often thus paraded together, being usually driven in a carriage and attended by music.

Girls are generally married in their 12 th or 13 th, and sometimes as early as their 10th year. A man in search of a bride employs the services of a relative, or of a professional female match-maker, and he never has an opportunity of seeing his bride until the wedding-day, except when the parties belong to the lowest classes. When everything is arranged, the affianced bridegroom has to pay a bridal-portion (mahr) amounting to about $25 l$., more being paid when the bride is a spinster than if she is a widow. Generally speaking, about two-thirds of the sum, the amount of which always forms a subject of lively discussion, is paid down, while one-third is settled upon the wife, being payable on the death of the husband, or on his divorcing her against her will. The marriage-contract is now complete. Before the wedding the bride is conducted in gala attire and with great ceremony to the bath. This procession is called 'Zeffet et Hammâm'. It is headed by several musicians with hautbois and drums; these are followed by several married friends and relations of the bride in pairs, and
after these come a number of young girls. The bride is entirely concealed by the clothing she wears, being usually enveloped from head to foot in a cashmere shawl, and wearing on her head a small cap, or crown, of pasteboard. The procession moves very slowly, and another body of musicians brings ap the rear. The hideous shrieks of joy which women of the lower classes utter on the occurrence of any sensational event are called zaghârît. The bride is afterwards conducted with the same formalities to the house of her husband.

The ceremonies observed at funerals are not less remarkable than those which attend weddings. If the death occurs in the morning, the funeral takes place the same day; but if in the evening, it is postponed till next day. The body is washed and mourned over by the family and the professional mourning women (nedd $\hat{a}-$ behs; a custom prohibited by Mohammed, but one dating from the remotest antiquity); the fikîh, or schoolmaster, reads several Sûrehs of the Korân by its side; after this, it is wrapped in its winding sheet, placed on the bier, covered with a red or green cloth, and then carried forth in solemn procession. The foremost persons in the cortége are usually six or more poor, and generally blind, men, who walk in twos or threes at a slow pace, chanting the creed'There is no God but God; Mohammed is the ambassador of God; God be gracious to him and preserve him!' These are followed by several male relatives of the deceased, and sometimes by a number of dervishes with the flags of their order, and then by three or more schoolboys, one of whom carries a copy of the Korân, or of parts of it, on a stand made of palm-branches, covered with a cloth. The boys usually chant in a loud and shrill voice several passages from the 'Hashrîyeh', a poem describing the last judgment. The bier, with the head of the deceased foremost, comes next, being borne by three or four of his friends, who are relieved from time to time by others. After the bier come the relations and friends in their everyday attire, and the female relatives, with dishevelled hair, sobbing aloud, and frequently accompanied by professional mourning women, whose business it is to extol the merits of the deceased. If the deceased was the husband or father of the family, one of the cries is - ' $O$ thou camel of my house', the camel being the emblem of the bread-winner of the household.

The body is first carried into that mosque for whose patron saints the relatives entertain the greatest velleration, and prayers are there offered on its behalf. After the bier has been placed in front of the tomb of the saint, and prayers and chants have again been recited, the procession is formed anew and moves towards the cemetery, where the body is let down a perpendicular shaft to a spacious vault excavated on one side of it, and there placed in such a position that its face is turned towards Mecca. The entrance to the lateral vault is then walled up, and during this long process the mourners recite the words: -.' 'Allâhu mughfir el-muslimîn
wa'l-muslimât, el-mûminîn wa'l-mûminât' (God pardons the Muslim men and the Muslim women, the faithful men and the faithful women). A Khaṭîb, Imâm, or other person then addresses a few stereotyped words to the deceased, informing him how he is to answer the two examining angels who are to question him during the ensuing night ( $\mathbf{p}$. lxxxix). A fâtha having again been whispered, and the perpendicular shaft filled up, while the mourners incessantly repeat the words - 'bismillâh er-raḥ̂mir rahmâni' (in the name of God, the merciful), the bystanders shake hands, and the male mourners disperse. The women, however, who have stood a little on one side during the ceremony, now come forward and inspect the tomb.

Another custom peculiar to the Muslims is that the separation of the sexes is as strict after death as during life. In family vaults one side is set apart for the men, the other for the women exclusively. Between these vaults is the entrance to the tomb, which is usually covered with a single large slab. The vaults are high enough to admit of the deceased sitting upright in them when he is being examined by the angels Munkar and Nekîr on the first night after his interment (see above); for, according to the belief of the Mohammedans, the soul of the departed remains with his body for three nights after his burial. For particulars regarding the tombs, see p. cxcix.

## Religious and Popular Festivals of the Mohammedans.

The dates of these festivals, which may all be seen to the best advantage at Cairo, cannot easily be given according to the European computation of time, owing to the variable character of the Arabian lunar year (comp. p.xcii). Calendars reducing the Mohammedan and Coptic reckoning of time to the European system may, however, be obtained at any bookseller's.

The first month of the Arabian year is the Moharrem, the first ten
 sidered holy. On these days alms are distributed, and amulets purchased. Mothers, even of the upper classes, carry their children on their shoulders, or cause them to be carried, through the streets, and sew into the children's caps the copper coins presented to them by passers-by. On the 10th Moharrem, the highly revered 'Ashara day, on which Adam and Eve are said first to have met after their expulsion from Paradise, on which Noah is said to have left the ark, and on which Husên, the grandson of the Prophet, fell as a martyr to his religion at the battle of Kerbela, the Gâmi'a el-Ḥasanein (p. 67) is visited by a vast concourse of religious devotees, whose riotous proceedings had better not be inspected except from a carriage, especially if ladies are of the party. Troops of Persians in long white robes parade the streets, cutting themselves with swords in the forehead until the blood streams down and stains their snowy garments. Two boys, representing Hasan and Husên, are also led through the streets on horseback, with blood-stained clothes. Strangers may also obtain admission to the Persian mosque, in which the orgies are continued, by special introduction. Towards evening a great zikr of whirling dervishes takes place here (p. xcv).

At the end of Safar, the second month, or at the beginning of Rabic el-awwel, the third, the Mecca Caravan (p.xcii) returns home, its approach being announced by outriders. Some of the faithful who go to meet the procession proceed as far as three days' journey, but most of them await its arrival at the Birket el-Hagg (p. 129), or pilgrims' lake.

Detached gronps of pilgrims occasionally return before the rest of the cavalcade, and their arrival is always signalised by the blowing of trumpets and beating of drums. A pyramidal wooden erection, called the Mahmal, hnng with beantifnlly embroidered stuffs, and carried hy a camel, accompanies the procession as a symhol of royalty. The interior of the Mahmal is empty, and to the outside of it are attached two copies of the Korần. The procession usually enters the city by the Bab en-Nas $r^{\circ}$ (p. 72): In $11 / 2-2 \mathrm{hrs}$. it reaches the Rumêleh (p. 53), the large open space in front of the citadel, from which last twelve cannon-shots are fired as a salnte. The cortége then sweeps round the Rumêleh, and finally enters the citadel by the Bâb el-Wezîr (Pl. E, 2). The departure of the pilgrims ( $p$. cii) is attended with similar ceremonies.

The great festival of the Môlid en-Nebi, the birthday of the prophet, is celebrated at the beginning of Rabî el-awwel, the third month. The preparations for it begin on the second day of the month, and the most important ceremonies take place on the evening of the eleventh. The city, and particularly the scene of the festival, is then illuminated by means of lamps hnng on wooden stands made for the parpose. Processions of dervishes (p. xciii) parade the streets with flags by day, and with lamps hoisted on poles by night. On this evening the sellers of sweetmeats freqnently exclaim - 'A grain of salt for the eye of him who will not bless the Prophet!' The Doseh, or ceremony of riding over the dervishes, also took place on the eleventh of this month. Some fifty dervishes or more lay close together on the ground, and allowed the shêkh of the Sardiyeh dervishes on horseback to ride over them. Accidents rarely happened, although the horse trod on every one of the prostrate figures. During this ceremony the spectators shouted incessantly, 'Allâh-lá-lá-lá-láh-láh!' This harbarous custom was forbidden by the Khedive Tewfik, and the ceremonies are confined to the procession of the shêkh and the reading of the Korân in the Khedive's tent. At night a great zikr is performed by the dervishes (p.xcv). On this festival, as on all the other 'môlids', the jugglers, buffoons, and other ministers of amnsement, ply their calling with great snccess (comp. pp. xxv-xxvii).

In the fourth month, that of Rabic el-Akhiv. (et-tani), occurs the peculiarly solemn festival of the birthday or Molid of Husên, the prophet's grandson, the principal scene of which is the mosque of Hasanein, where the head of Husên is said to be interred. This festival lasts fifteen days and fonrteen nights, the most important day being always a Tuesday ( $y \Delta m$ et-telat). On this occasion the 'Ilvanîyeh Dervishes (p.civ) sometimes go through their hideous performance of chewing and swallowing burning charcoal and broken glass, and their wild dances. On the chief days of this festival, and on their eves, great crowds congregate in and around the mosque, and especially by the tomb of Sulṭan es-Sâleh in the bazaar of the Nahhâsîn (p. 51). On these occasions the K̇orẩn is read aloud to the people, the streets adjoining the mosque are illnminated, the shops are kept open, and story-tellers, jugglers, and others of the same class attract numerous patrons.

In the middle of Regeb, the seventh month, is the Molid of Seiyideh Zênab ('Onr Lady Zênab'), the granddaughter of the prophet. The festival, which lasts fourteen days, the most important heing a Tuesday, is celebrated at the mosque of the Seiyideh Zênab (p. 59), where she is said to be bnried.

On the 27th of this month is the Lêlet el-Mír ág, or night of the ascension of the prophet, the celebration of which takes place outside the Bâb el-rAdawi, in the N. snhurb of Cairo.

On the first, or sometimes on the second, Wednesday of Shaman, the eighth month, the Malid of Imam Shafe'i is commemorated, the centre of attraction being the burial-place of E1-Karâfeh (p. 80). This festival is numerously attended, as most of the Cairenes helong to the sect of Imâm Shâfe'i (p. xciii). The ceremonies are the same as those at the other môlids.

The month of Ramadin (p. xcii), the ninth, is the month of fasting, which begins as soon as a Muslim declares that he has seen the new
moon. The fast is strictly observed during the day, but the faithful indemnify themselves by eating, drinking, and smoking throughout the greater part of the night. At dnsk the streets begin to be thronged, the story-tellers at the cafés attract large audiences, and many devotees assemble at the mosques. The eve of the 27th of the month is considered pecnliarly holy. It is called the Lêlet el-Kadr', or 'night of hononr', owing to the tradition that the Korân was sent down to Mohammed on this night. During this sacred night the angels descend to mortals with blessings, and the portals of heaven stand open, affording certain admission to the prayers of the devout. On this night the traveller should visit the Hasanein mosque, or, especially if accompanied by ladies, that of Mohammed 'Ali ( $\mathbf{p}$. 54) in the citadel, in order to see the great zikrs of the whirling and howling dervishes, of whom some thirty or forty take part in the performances. The scene is of an exciting, but somewhat painful character, particularly if any of the performers become 'melbas', a condition resembling that of epileptic convulsion (p. xcvi).

The month Ramadian is succeeded by that of Shawodl, on the first three days of which is celebrated the first and minor festival of rejoicing, called by the Arabs El-‘Id es-Sughayyir (the lesser feast), but better known by its Turkish name of Bei $\cdot \hat{a m}$. The object of the festival is to give expression to the general rejoicing at the termination of the fast; and, as at onr Christmas, parents give presents to their children, and masters to their servants at this festive season. Friends embrace each other on meeting, and visits of ceremony are exchanged. During this festival the Khedive also receives his principal officials, ambassadors, and other dignitaries.

At this season the traveller may also pay a visit to the cemetery by the Bâb en-Nasr, or to one of the others, where numerons Cairenes assemble to place palm branches or basilicum (rihan) on the graves of their deceased relatives, and to distribute dates, bread, and other gifts among the poor.

A few days after the Beirâm, the pieces of the Kisweh, or covering manufactured at Constantinople, at the cost of the Sultan, for the Karba (the most sacred sanctuary in the interior of the temple at Mecca), whither it is annually carried by the pilgrims, are conveyed in procession to the citadel, where they are sewn together and lined. The ceremonies which take place on this occasion are repeated on a grander scale towards the end of the month of Shawwal (generally the 23rd), when there is a gay procession of the escort which accompanies the pilgrimage caravan to Mecca, and which takes charge of the Mahmal (p. ci). On this occasion every true believer in the prophet, if he possibly can, spends the whole day in the streets. The women don their smartest attire. Many of the harem windows are opened, and the veiled inmates gaze into the streets. The chief scene of the ceremonies is the Rumêleh (Pl. F, 2), at the foot of the citadel, where a sumptuous tent of red velvet and gold is pitched for the reception of the dignitaries. The procession is headed with soldiers, who are followed by camels adorned with gaily coloured trappings, and bearing on their homps bunches of palm-branches with oranges attached. Each section of the cavalcade is preceded by an Arabian band of music, the largest section being that which accompanies the Takht Rawan, or litter of the Emir el-Hagg, and the next in order that of the Delîl el-Hagg, or leader of the pilgrims, with his attendants. Next follow various detachments of pilgrims and dervishes with banners, and lastly the Mahmal (see p. ci). A picturesque appearance is presented by the camp of the assembled pilgrims (Haggi) at the Birket el-Hagg (p. 129), whence the caravan finally starts for Mecca.

On the 10th of Dhil-higgeh, the twelfth month, begins the great festival of El-「Id el-Kebîr, which resembles the lesser feast (el-rid es-sughayyir) already mentioned. On this day, if on no other throughout the year, every faithful Muslim eats a piece of meat in memory of the sacrifice of Abraham, and the poor are presented with meat for this purpose by the rich.

The Muslims also celebrate the Christian Easter Week, although in a different manner, and of course for different reasons from the Christians. On

Palm Sunday (had el-khus) the women bind palm twigs round their heads and fingers. On the following day (Monday) it is customary to eat fakus (cucumbers) with cummin. On the Tuesday the diet of the faithful consists of a kind of cheese-broth with onions, and the day is therefore called yôm el-mish wa'l-başal ('cheese-soup-and-onion-day'). Wednesday is called arbar Eyâb, or 'Job's Wednesday'. On this day the ghubera herb is said to have addressed to Job the words - 'Wash thyself with my juice, and thou shalt recover'. He did so, and recovered, and to this day the whole of the Egyptian Muslims wash themselves with gharghara Eyab in memory of the miracle. Maundy Thursday is the Pea-Thursday of the Muslims (khamîs el-bisilla). Good Friday is called gum'a el-maf 0 人l$k a$, or 'day of the butter-cakes'. Saturday is the sebt en-nay' or 'sabbath of light' (so named from the sacred fire which on this day bursts forth from the Holy Sepulchre at Jerusalem). On this day it is customary for the Mnslims to use a kind of eye-powder for the parpose of strengthening their eyes, to get themselves bled, and to eat coloured Easter eggs. On Easter. Sunday ( $\hat{i} d$ en-nusdra) the Mohammedans asually visit their Christian friends, and these visits are returned during the feast of Beirâm.

With the Rising of the Nile there are also connected several interesting festivals, closely resembling those of the ancient period of the Pharaohs, which even the Christian epoch was unable entirely to obliterate. As, however, they take place in summer, few travellers will have an opportunity of witnessing them. As these festivals have reference to a regularly recurring phenomenon of nature, their dates are necessarily fixed in accordance with the Coptic solar reckoning of time, instead of the variable Arabian lunar year. - The night of the 11th of the Coptic month Ba'ûna (17th June) is called Lêlet en-Nukṭa, i.e. the 'night of the drop', as it is believed that a drop from heaven (or a tear of Isis, according to the ancient Egyptian myth) falls into the Nile on this night and causes its rise. The astrologers profess to calculate precisely the hour of the fall of the sacred drop. The Cairenes spend this night on the banks of the Nile, either in the open air, or in the houses of friends near the river, and practise all kinds of superstitious customs. One of these consists in the placing of a piece of dough by each member of a family on the roof of the house; if the dough rises, happiness is in store for the person who placed it there, while its failure to rise is regarded as a bad omen. On 21 st June the river begins slowly to rise comp. p. 1vii). On the 27th of the Coptic month Ba'ûna (3rd July) the Munadi en-Nil, or Nile-crier, is frequently heard in the morning, announcing to the citizens the number of inches that the river has risen. The munâdi is accompanied by a boy, with whom he enters on a long religious dialogue by way of preface to his statements, which, however, are generally inaccurate. The next important event is the Cutting of the Dam (ydm gebr el-bahr; or yom wefa el-bahr), which takes place between the 1 st and the 14th of the Coptic month of Misra (i.e. between 6th and 19th August), when the principal ceremonies are performed on and near the island of Rôda (p. 82). The Nile-crier, attended by boys carrying flags, announces the Wefa en-Nil (the plenitude, or superfuity of the Nile), or period when the water has reached its normal height of sixteen ells (p. lvii). The cutting through of the dam takes place amid general rejoicings and noisy festivities. It appears from inscriptions on columns found on the Nile near the Gebel Selseleh, that similar festivals connected with the rise of the river were celebrated as early as the 14 th cent. before Christ.

# IV. Outline of the History of Egypt. 

Chronological Table.

Intronuction. There is no people in the world whose history is traceable to so remote a period as that of the Egyptians. Other nations may possibly have understood the art of writing as early as they, but no specimens of it have been preserved; whereas the Egyptian records, hewn in stone, burned in clay, or written on leather or on scrolls of papyrus, have survived the ravages of thousands of years. The preservation of these memorials, however, is mainly due to the dryness of the air in the rainless valley of the Nile, and to the property possessed by the hot sand of the desert of hermetically sealing everything committed to its keeping.

The remote dates with whioh Egyptian chronology deals seem mythical when judged by the standards of Jewish and Christian chronographers, and particularly when compared with the supposed date of the creation of the world; but they are derived from the lists given by Manetho, which have been confirmed by the monuments themselves.

The priest Manetho (Egypt. Mai en Thot, i.e. 'beloved of Thoth') of Sehennytus (the modern Semennûd, p. 221), being acquainted with the Greek language, was employed by King Ptolemy II. Philadelphus (B.C. 284-246) to translate the ancient historical works preserved in the temples. This 'Egyptian History' of Manetho enjoyed a high reputation at a later period, but was subsequently lost, with the exception of his lists of kings and their dates, which have been transmitted to us partly by Flavius Josephus, the Jewish historian (1st cent. A.D.), and partly by Christian historians.

The Monuments and Inscriptions in some cases confirm, and in others supplement, the records transcribed by Manetho for the Ptolemies, our information being derived from the series of kings' names inscribed ou various monuments, from papyrus scrolls, and lastly from historical and genealogical notices on the walls of temples and tombs, on statues, implements, and trinkets. A methodical mode of utilising these fragmentary historical records was first taught by the learned Prof. Lepsius (d. 1884).

The lists of the Pharaohs are arranged in the families or dynasties of the Thinites, Memphites, and others. If it be assumed that these different houses reigned in succession, and their reigns be simply added together, the sum which results is very large. But, if it be assumed that many of the dynasties mentioned hy Manetho reigned contemporaneously in different parts of the country, the reigns of members of the leading dynasties alone have to be added together, and a comparatively moderate sum is the result. Adopting the former method of computation M. Mariette has fixed the date of Menes, the first King of Egypt, as B.C. 5004, while Sir Gardner Wilkinson, proceeding on the latter assumption, assigns the date B.C. 2300 to the same monarch. Lepsius helieves the true date to be B.C. 3892, as Manetho states that an interval of 3555 years (or 3553 , taking into account the difference hetween the Egyptian and the Julian year) elapsed hetween the reign of Menes, the firstKing of Egypt, and that of Nectanebus II. (B.C. 340), the last of the native sovereigns. Brngsch fixes the date as B.C. 4400 . Our information becomes more definite after the beginning of the New Empire, while from the 26th Dynasty (B.C. 685) downwards the dates of the different kings are well ascertained.

In accordance with the arrangement of the history of Egypt given by Lepsius, and now generally accepted, the mythical period was succeeded by that of the Primaeval Monarchy, the Hybsos Domination, and the New Empire, which were followed by the supremacy of the Persians, the Ptolemies, and the Romans in succession. Another system recognizes between the Old and the New Empire a Middle Monarchy, which includes the period of the Hyksos. These divisions, in conformity with the lists of Manetho, are again subdivided into Dynasties, or different families of kings, named after the districts or nomes ( p . xxxiii) of which their founders were natives.

## Chronological Table.

## Primæral Monarchy.

M. 5004 +.
L. 3892 .
B. 4400 .
W. 2700.
L. 3639 .
M. 4449.
L. 3338.
B. 3773 .
M. 4235.
L. 3124.
W. 2450 .
I. DYNASTY (Thinites, i.e. from Teni, the Greek This, near Abydos in Upper Egypt).
Menes (Egyptian Mena), the first earthly king of Egypt, who is said to have founded Memphis (see p. 160).
Athothis (Eg. Teta).
Usaphaïs (Eg. Hesepti), who is said to have written anatomical works.
II. DYNASTY (Thinites).
III. DYNASTY (Memphites, from Memphis, which soon obtained precedence over the more southern royal city of This).
Tosorthros (Eg. Teta), who studied medicine. In his reign the calendar is said to have been regulated, and the year of 365 days introduced (consisting of twelve months of thirty days, with five supplementary days).
IV. DYN AsTY (Memphites ; p. 134).

Snefru (pp. 134, 236, 248), the founder of the 4th Dynasty, and the first king of whose reign we possess contemporaneous monuments. Long after his death he continued to be highly extolled, and was even revered as a god. Khufu (the Cheops of the Greeks) | Builders of the Khåfrà (the Chephren of the Greeks; pp. clxv, 98, 134)
Menkaurà (the Mykerinos of the Greeks) (pp. 133 et seq.).
Khufu and Khafra have been handed down to the detestation of posterity as prolligate despisers of the gods, chiely owing to the account of them given by Herodotus (ii. 124 ; see pp. 135 et seq.), who, however, was ill informed with regard to the earliest period of Egyptian history. The monuments themselves bear testimony to the fact that the family and conrt of the bnilders of the Great Pyramids were pions worshippers of the gods, that they were prosperous and wealthy, and that they were industrious and persevering in their undertakings. At that period the fine arts, and

[^12]L. 2840 .
M. 3951 .
L. 2744.
W. 2240.
M. 3358.
L. 2674.
L. 2565.
M. 3064.
L. 2423.
B. 2855.

2380-1209.
M. 2851.
L. 2380.
B. 2466 .
W. 2080.
particularly that of sculpture, attained a perfection which the Egyptians never again reached. The inscriptions on the monuments also exhibit a high degree of technical skill.
V. DYNASTY (Memphites; pp. 158, 173, 248).
VI. DYNASTY (Elephantines, from Elephantine, nearSyene, the modern Assuân, situated in Upper Egypt ; p. 248). Teta.
Pepi I. (p. 187).
Pepi 11. (p. 187).
Nitokris (Eg. Neitaker).
VII. DYNASTY (Memphites).
VIII. DYNASTY (Memphites).
IX. DYNASTY (Heracleopolites, from Heracleopolis Parvat, the Karba of Egyptian and Karbanis of Assyrian inscriptions, situated in the N.E. part of the Delta.
X. DYNASTY (Heracleopolites).
XI. DYNASTY (Diospolites, from Diospolis, i.e. Thebes, now Luxor-Karnak-Medînet Abû in Upper Egypt). On the coast of the Delta, which at this remote period was most probably a very swampy district, densely overgrown with marsh vegetation, and which was first brought under cultivation in the neighbourhood of This, and afterwards around Memphis, the towns of Tanis and Heracleopolis Parva had been founded at a very early epoch by seafaring peoples of Semitic origin. They thence penetrated into the interior of the country, where they came into collision with the Egyptians coming from the south, whose culture they adopted. At the same time, however, they retained their independence under kings of their own, who during the period of the 6th, 7th, and 8th Dynasties formed the 9th and 10th contemporaneous Dynasties of Heracleopolites, from the year 2691 onwards, and who ruled over the Delta and perhaps the whole of Lower Egypt. The 11th Dynasty, which put an end to the sway of the Heracleopolites, is called Diospolite, or Theban, but in the estimation of the Egyptians was not a strictly legitimate line.

## Middle Monarchy.

XII. DYNASTY (Diospolites; pp. clxvi, clxx, 128).

Amenemha I. (Gr. Ammenemes; p. 128).
Usertesen I. (Gr. Sesonchosis; p. 128). Amenemha II. (Gr. Ammanemes). Usertesen II. (Gr. Sesostris; p. 248). Usertesen III. (Gr. Lachares).
Amenemha III. (Gr. Ameres; p. 278).
Amenemha IV. (Gr. Amenemes).
Sebek-nefru (Gr. Skemiophris).

[^13]Under this Dynasty the sceptres of Upper and Lower Egypt were united. All the kings were powerful and prosperous, and art again flourished. The Sun Temple at Heliopolis (see p. 128) was magnificently restored, and in the Fayûm the practice of building pyramids was revived. During this period, too, fortiflcations were erected on the N.E. frontier of the kingdom which appear to have extended across the whole of the present Isthmus of Suez (p. 204).

The Hyksos Period (pp. 102, 103, 229, 236).
In the 12th Dynasty we already hear of Semitic families applying for admission to Upper Egypt ${ }^{\dagger}$, and in the 13th Dynasty these immigrations became more frequent. The newcomers met with kinsmen in the seaports of the Delta, allied with whom and with Arabian tribes they at length became so powerful as to defeat the armies of the Pharaohs and obtain possession of the whole of Lower Egypt. They made Tanis their capital, and under the name of Hyksos ruled over N.Egypt for five centuries, while the exiled royal family was compelled to retire to Upper Egypt. (The name of 'Hyksos', according to Josephns, Manetho, and others, is derived from hyk, a king, and sos, a shepherd, and thus signifles 'Shepherd Kings'; some modern authorities, however, derive it from halk shasu, signifying 'Robber Kings'.) The Hyksos soon conformed to the ancient culture of the valley of the Nile. They applied the name of the Egyptian god Set to their own gods (Be'alîm); and the sphinxes preserved at Tanis with the portrait-heads of their kings (p. 103) prove that they took Egyptian artists into their service, and perhaps themselves acquired a knowledge of the Egyptian plastic art (pp. clxviii, 102, 103). At the same time they adopted all the titles of the Pharaohs and the whole of the court ceremonies of the legitimate monarchs of Egypt. †
L. 2136.
XIII. DYNASTY (Diospolites).
XIV. DYNASTY (Khoites, from Khoïs, the modern Sakha, situated to the N.E. of Sais).

[^14]L. 1684 .
B. 2115.
M. 1703.
L. 1591.
B. 1700 .
W. 1520 .
XV. DYNASTY (Hyksos). XVI. DYNASTY (Hyksos).
XVII. DYNASTY (Diospolites).

We learn from a papyrus in the British Museum that the Hyksos monarch Apepi demanded the cession of an important well from Rasekenen, the king of Upper Egypt (17th dyn.). This incident gave rise to the outbreak of a war of independence which lasted for eighty years.
XVIII. DYNASTY (Diospolites; p. cix).

Aahmes I. (Amōsis, or Amāsis; pp. 107, 123) captured Abaris (Ha-war) after a long siege by land and by water. The Hyksos (numbering, accordilig to Manetho, 24,000 men capable of bearing arms) were obliged to retreat and to seek a new territory, and most of them accordingly settled in S. Palestine. The successors of Aahmes penetrated far into Asia, subjugated one nation after another, exacted heavy tribute from the vanquished, and embellished Thebes, their capital, with magnificent ediflces.
Amenhotep I. (Gr. Amenophthis; pp. 123, 125).
Tutmes (Thothmes) I. (Gr. Amensis; p. 125).
Tutmes II. (Gr. Misaphris; p. 124) and Ramaka, his sister and wife (pp. 123, 124, 125).
Tutmes III. (Gr. Misphragmuthosis; pp. 106, 124, 153, 278 et seq.) ex tended his conquests as far as the vicinity of the Tigris. Tutmes IV. (Gr. Tuthmosis).
Amenhotep III. (Gr. Amenophis; pp. 107, 167, 190) not only continued to exact tribute from the Oriental nations as far as Mesopotamia, but succeeded in extending his dominions towards the south. He was also remarkable for his extraordinary building enterprise.
Amenhotep IV. (Gr. Horos) returned to the earlier and ruder religion of worshipping the sun. For his name Amenhotep ('peace of Ammon') he therefore substituted Khu-en-aten ('reflection of the sun's disk').
Ramses I. (Rhamesses; pp. 205, 212).
M. 1462.
L. 1443.
B. 1400 .
W. 1340.
XIX. DYNASTY (Diospolites, pp. clxviii, 205, 228).

Seti I. (pp. 124, 205, 228) undertook several campaigns against the Aramaic tribes, who had formed a league under the hegemony of the powerful Kheta (or Khittim, the Hittites of the Bible), and penetrated as far as the Orontes. He erected the Memnonium at Abydos, and caused a sepulchre to be hewn for himself in the rock at Thebes. He caused Ramses, his son and successor, to be educated along with other young Egyptian nobles, and it is possible that Moses formed one of the number (Exod. ii. 10). Seti devoted special attention to the Delta and to Tanis, the ancient capital of the Hyksos, where he erected extensive buildings
with the aid of the Semites, among whom the Israelites must also be included. During this reign a great canal was completed in Goshen (see p. 193), leading from the Nile to the E. frontier of the kingdom, and probably thence through the Bitter Lakes to the Red Sea, but chiefly destined for the irrigation of the land of Goshen.
Ramses II. the Sesostris of the Greeks (pp. 105, 107, 125, 161 et seq., 193, 205, 228, 229, 238), with a view to vindicate his supremacy over the nations subjugated by his ancestors, undertook campaigns towards the S. to Donkola, towards the N. to Asia Minor, and towards the E. to the Tigris, to commemorate which he erected monuments of victory in various parts of the conquered countries. He exhibited great zeal as a builder, and was a patron of art and science. He erected the Ramesseum at Thebes, and presented it with a library. Pentaur, Amenemapt, and other poets flourished during this reign. Ramses II. was the 'Pharaoh of the Oppression' (Exod. i. 11). Merenptah (Gr. Amenephthes), the 'Pharaoh of the Exodus' (pp. 229, 238). During his reign (in the year 1325, according to Brandes) the termination of a Sothis period ${ }^{\dagger}$ was oelebrated. A conflict which broke out between this monarch and the Israelites settled in Goshen resulted in his discomfiture (Exod. xiv.).

## The New Empire.

1209-525.
M. 1288 .
L. 1209.
B. 1200 .
W. 1200.
M. 1110 .
L. 1091.
B. 1100 .
W. 1085.
XX. DYNASTY (Diospolites; p. 236).

Ramses III. (the Rhampsinitos of Herodotus, ii. 121; see also pp. 123, 128), though successful in his campaign against the Libyans and in other warlike enterprises, could not vie with his ancestors in military glory, but endeavoured to surpass them in the magnificence of his buildings. His monument at Bîbân el-Mulûk, near Thebes, is one of the finest now in existence. Most of the rock-tombs in this city of royal mausolea were founded by his successors of the same Dynasty, all of whom also bore the name of Ramses (IV-XIII.). XXI. DYNASTY (Tanites, from Tanis, in the N.E. part of the Delta; pp. 161, 228).

[^15]M. 980 .
L. 961 .
B. 966 .
W. 990 .
M. 810 .
L. 787.
W. 818 .
M. 721.
L. 729 .
B. 733 .
M. 715.
L. 716 .
B. 700 .
W. 714 .

The throne of the Ramessides was now usurped by ambitious hierarchs of Tanis, headed by Herhor, the chief priest of Ammon; and Thebes was thus deprived of her ancient preeminence. This dynasty of priest-kings reigned ingloriously. Being unable to exact obedience from their Asiatic vassals by force, they endeavoured to maintain their snzerainty by a conciliatory policy. (See also the relations of Solomon with Egypt: 1 Kings iii. 1; ix. 16; x. 28.)
XXII. DYNASTY (Bubastites, from the Bubastis of the Greeks, the Pibeseth of the Bible, the Pibast of the Egyptian monuments, the modern Tell Bastain the Delta; pp. clxix, 192).
Sheshenk I. (the Sesonchis of the Greeks, the Shishak of the Bible; p. 229) assisted Jeroboam against Rehoboam, and besieged and captured Jerusalem.
Osorkon (Gr. Osorthon, the Zerah of the Bible, 2 Chron. xiv. 9 ; xvi. 8) invaded Palestine, but was signally defeated by Asa.
XXIII. DYNASTY (Tanites; p. 228).

Tefnekht, Prince of Saïs and Memphis, attempted to possess himself of the sovereignty of Lower Egypt, but was defeated by Piankhi, King of Ethiopia, who captured Memphis, but afterwards retnrned to his own country (see p. 104).
XXIV. DYNASTY (Saïtes, from Sais, the modern Ṣâ elHager ; p. 222).
Bek-en-ranf (Gr. Bocchoris) vainly endeavoured by a new legislation to arrest the decline of the empire. In 716 Egypt fell into the hands of the Ethiopians. - Interregnum.
XXV. DYNASTY (Ethiopians). Shabako (Gr. Sabacon; the So of the Bible, 2nd Kings xvir, 4) conquered Upper Egypt, and resided at Thebes, but made no alteration in the religion or the constitution of the country. His sister Ameneritis (p. 105) became the wife of King Ra-menkheper Piankhi, and their daughter Shep-en-apet married Psammetikh I. (see p. cxi).
Shabataka (Gr. Sebichos) led an army to the assistance of the Jewish king Hezekiah, but was defeated at Altaku by Sennacherib, King of Assyria.
Taharka (Gr. Tearco; the Tirhakah of the Bible, the Tarku-u of the Assyrian monuments; pp. 104, 117) formed an alliance with the kings of Phœenicia and Cyprus against Assyria, but was defeated in Egypt by Esarhaddon, the son and successor of Sennacherib, and driven back to Ethiopia. The Assyriaus then plundered Thebes and divided the country among twenty princes, among whom Nekho (the Nechoh of the Bible), prince of Sais, became the most prominent.

After Esarhaddon's death Taharka endeavoured to shake off the Assyrian yoke, but was defeated and driven out of Egypt by Assurbanipal (Sardanapalus), Esarhaddon's son and successor. The vassal princes assisted Taharka, but were pardoned by Assurbanipal and reinstated in their provinces on a solemn vow of future obedience.

Nut-Amen (Assyr. Urdamani) captured Memphis and won back the whole of Lower Egypt, but was in his turn defeated by Sardanapalus, who again invaded Egypt.

After the departure of the Assyrians and the decline of their power under the successors of Sardanapalus, the petty Egyptian princes attained complete independence and established the so-called 'Dodekarchy'. An end, however, was put to this by Psammetikh, son of Nekho, and prince of Saïs and Memphis, with the aid of Ionian and Carian mercenaries. As the nephew (by marriage) of Shabako (p. cx) Psammetikh was the legitimate heir of the Ethiopian dynasty, and he accordingly ascended the throne of Egypt and founded the -

664-525.
664-610.

610-594.
XXVI. DYNASTY (Saïtes; pp. clxix, 223).

Psammetikh I. (Egypt. Psemtele, Gr. Psammetichos; p. 167), in order to consolidate his empire, assigned dwellings to the Greek mercenaries in the fertile region of Bubastis, and favoured foreigners in many ways. The warrior caste of Egypt, highly offended at this proceeding, emigrated to Ethiopia, and there founded the kingdom of the Sembrides. Profting by the decline of the power of Assyria, Psammetikh made war against the wealthy Phœnician seaports, but was stoutly opposed by the Philistines.
Nekho (Grk. Nechos, Egypt. Nelau ; p. 205), the son of Psammetikh, was more concerned for the domestic welfare of the country than for military glory. During his reign the S. extremity of Africa was circumnavigated for the first time (Herod. iv. 42). Nekho began to construct a canal from the Nile to the Red Sea, but discontinued the work on being informed by an oracle that it would only beneflt 'strangers.' Hearing of the campaign of the Medes and Babylonians against the Assyrians, he also marched against Assyria, and defeated Josiah, King of Judah, the ally of the Assyrians, who opposed him at Megiddo. Meanwhile, however, Nineveh had fallen, and the Assyrian empire been divided by Cyaxares, King of Media, and Nabopolassar, King of Babylon; and Nekho's farther progress was arrested by Nebuchadnezzar, King of Babylon and son of Nabopolassar, who defeated him at Karkemish (Circesium). Nekho thus lost his possessions in Syria and Palestine.

594-589. Psammetikh II. (Psammis, or Psammuthis; p. 107).
Uahbra (Gr. Apries or Uaphris; the Hophrah of the Bible), observing that the Babylonians were encroaching on Palestine, fitted out an army and fleet, captured Sidon, defeated the Cyprians and the Tyrians in a naval battle, and marched to the relief of Zedekiah, King of Judah, who was besieged in Jerusalem by Nebuchadnezzar. That city having been again besieged by Nebuchadnezzar and captured, Uaphris accorded an asylum to its exiled inhabitants. He afterwards sustained a defeat from Battos II., King of Cyrene, in consequence of which his army rebelled against him. Aahmes, who had been dispatched by him to treat with the insurgents, was then proclaimed king, and he himself was dethroned.
Aahmes II. (Gr. Amasis; p. 168) succeeded in securing his supremacy by alliances with Cyrene, with the tyrant Polycrates of Samos, and with the Greeks. He assigned land to foreign colonists, granting them religious toleration, and diverted the stream of commerce from the semi-Phœnician cities of the Delta (Tanis, Mendes, and Bubastis) towards the Greek city of Naucratis (see p. 8). During his reign the country enjoyed peace and prosperity, but the balance of power among the great nations of that era underwent a considerable change. Cyrus had meanwhile founded the vast Persian empire, and consolidated it by means of the conquest of the Babylonian and Lydian kingdoms. His son Cambyses next marched against Egypt, the only great power which still rivalled Persia. Having advanced to Pelusium with a large army, he there defeated Psammetikh III., son of Amasis, who was now dead (p. 161), captured Memphis, and took the king prisoner. Psammetikh was afterwards executed for attempting to organise an insurrection to shake off the foreign yoke.

## The Persian Domination.

 169, 222) at first behaved with great moderation. He tolerated the Egyptian religion, and to his own name he added the Egyptian agnomen of Ramesut, or 'child of the sun'. After, however, he had failed in several rash enterprises, such as his campaigns against the inhabitants of the oasis of Ammon and against the Ethiopians, his temper became soured, and his conduct violent and cruel. He died at Akbatana in Syria, while marching to Persia against Gaumata, a usurper who personated Bardiya (Gr. Smerdis),the deceased brother of Cambyses, who had been assassinated long before this period by order of the king himself.
521-486.
Darius I. (Pers. Daryavus), son of Hystaspes (Vistaspa), became king of the Persian empire on the dethronement of the usurper Gaumata (the personator of Smerdis). His policy consisted in modifying his rule over each part of his territory in accordance with its own special requirements. He endeavoured to promote the prosperity of Egypt in every possible way. He established new commercial routes from Koptos in Upper Egypt to the Red Sea, and from Siût and Abydos to the Sûdân; he resumed the construction of the canal from the Nile to the Red Sea (pp. cix, cxi); he improved the roads of Egypt; he sent a strong garrison to the oasis of Khârgeh (p. 1xiii), and erected a temple to Ammon there; he coined money for the use of the Egyptians, whose currency had hitherto consisted of stamped rings and weights; and he appointed Amasis, a scion of the 26th Dynasty, his satrap in Egypt. Hearing that the Persians had been defeated by the Greeks (in 492 and 490), the Egyptians

399-393. revolted against the Persian yoke under the leadership of Khabbash, a descendant of the family of Psammetikh. The insurrection, however, was soon quelled by -
Xerxes I. (Pers. Khshayarsha), son of Darius; Khabbash disappeared, and Achaimenes, the king's brother, was appoined satrap.
Artaxerxes I. (Pers. Avtalchshathra), surnamed Makrocheir, or Longimanus, next ascended the Persian throne. During his reign the Egyptians again revolted. Prince Inaros of Marea, aided by the Athenians, defeated Achaimenes, the Persian satrap, but the allied Egyptiaus and Greeks were in their turn defeated by the Persian general Megabyzos near Prosopitis, an island in the Nile, and Inaros was crucifled. Amyrtaeos, a scion of a princely Egyptian family, and a partizan of Inarus, then sought an asylum in the marshy coast district, where he succeeded in maintaining his independence.
Herodotus travels in Egypt.
Darius II. (Pers. Daryavus), surnamed Nothos, or the Bastard. The Egyptians now revolted for the third time. Pausiris, son of the Amyrtæos above mentioned, had meanwhile been succeeded by a second Amyrtaeos, who still maintained the independent position of his predecessors in the Delta. This Amyrtæos headed the new insurrection, which became general in 404; and he was soon recognised as king of the whole of Egypt. He founded the 28th Dynasty, Baederer's Egypt I. 3rd Ed.

405-362.
393-383.

383-382.
382. 378.

378-362.

362-340.
361-345.

337-330
332-323.

527-399.
399-378.

378-340.
pherites) of Mendes at length succeeded in completely throwing off the Persian yoke, and became the founder of the 29th Dynasty. His chief endeavour was to secure the friendship of the Greeks, with a view to strengthen himself against the Persians.
Artaxerxes II., surnamed Mnemon.
The Persian king endeavoured to recover Egypt, but Akhoris, the successor of Naifâurut, threw obstacles in his way by supporting his enemies, particularly Euagoras, the tyrant of Salamis in Cyprus, and by improving the defences of his country.
Psamut (Psammuthis) and -
Naifâurut (Nepherites) II., the successors of Akhoris, reigned for short periods only.
Nekht-hor-heb (Nectanebus I.), however, the next native monarch, a Sebennytic prince, the founder of the 30 th Dynasty, completed the warlike preparations of the Egyptians, and entrusted the chief command of his troops to Chabrias, an Athenian general, who signally defeated Pharnabazus, the Persian general, at Mendes.

## Artaxerxes III., Ochos.

Tachos or Teos, who succeeded Nekht-hor-heb, invaded Persian Phœnicia, supported by a body of Greek allies. During his absence, his nephew Nekht-nebf (Nectanebus II.) usurped the Egyptian crown, but was defeated by Artaxerxes III. and driven into Ethiopia. Egypt now surrendered to Artaxerxes, and again became a Persian satrapy (345).
Darius III., Codomannus.
Alexander the Great, after having defeated Darius on the Granicus (334), and at Issus (333), and captured the Philistine town of Gaza, marched to Pelusium, and was received with open arms by the Egyptians, who regarded him as their deliverer from the Persian yoke. He tolerated the native religion, visited the Oasis of Ammon, and founded Alexandria (p. 8), which, under the Ptolemies, became the great centre of Greek culture and of the commerce of the whole world.

In the lists of the Pharaohs we find the 28th, 29th, and 30th Dynasties mentioned as contemporaneous with the 27 th or Persian Dynasty.
XXVIII. Dynasty (Saĭtes): Amyrtaeos (Amen-rut).
XXIX. Dynasty (Mendesites, from Mendes, in the Delta; see p. 218) : -

399-393 Nepherites $I$.
393-383 Akhoris.
383-382 Psammuthis.
382-378 Nepherites II.
XXX. Dynasty (Sebennytes, from Sebennytus, the modern Semennûd, in the Delta; p. 221): -
182. Ptolemy VI. Eupator, his son, died the same year.
t Cilicia in Asia Minor. The power of Egypt abroad was now at its zenith.
Ptolemy IV. Philopator. Under this king and his successors, a series of degenerate monarchs, the great empire of the Ptolemies hastened to its destruction. He defeated Antiochus the Great of Syria, who had marched towards the Egyptian frontier, at the Battle of Raphia, but concluded a dishonourable peace with him.
Ptolemy V. Epiphanes (pp. 225 et seq.) ascended the throne, when five years of age, under the guardianship of Agathocles and Enathe, the mother of the latter. In consequence of revolts at Alexandria and Lycopolis, and an attack by Antiochus the Great of Syria, his guardians were obliged to resign their office in favour of the Roman Senate, by whom Cœlesyria and Palestine were ceded to Antiochus, while Egypt continued to be independent. Ptolemy V., having been prematurely declared of full age in 196 , married Cleopatra I., daughter of Antiochus the Great. This alliance not only secured peace abroad, but caused a portion of the revenues of Cœlesyria, Phœnicia, and Judæa again to flow into the treasury of Alexandria. The internal affairs of the country, however, fell into a state of deplorable confusion; one rebellion succeeded another, and anarchy prevailed everywhere.
Ptolemy V. was poisoned.

378-364. Nekht-hot-heb (Nectanebus I.).
364-361. Tacho (Teos).
361-345 (?). Nekht-nebf (Nectanebus II.).

He assassinates his wife, and is himself slain.
Battle of Pelusium. Philometor is taken prisoner, and Memphis captured, by Antiochus IV. of Syria.
Ptolemy VIII. was now placed on the throne, but was immediately assassinated by Ptolemy IX. Euergetes II. (nicknamed Physcon, or 'big belly').
Ptolemy VII. Philometor and Ptolemy IX. Physcon, having become reconciled, reign jointly.
The brothers quarrel; Philometor fies to Rome, is reinstated by the Roman Senate, and thenceforth reigns alone; while Euergetes, by command of the Roman Senate, reigns at Cyrene.
Philometor and Demetrius Nikator defeat Alexander Balas on the Orontes. Philometor dies.
Ptolemy Physcon besieges Alexandria, and becomes the guardian of the heir-apparent, a minor.
He is overthrown by a revolution, and retires to Cyprus. He regains possession of the throne. Physcon dies. Cleopatra III. Cocce, his niece and widow, and her son Ptolemy X. Soter II. Philometor II. (Lathyrus) reign jointly.
Lathyrus is banished, and his brother Ptolemy XI. Alexander I. becomes co-regent in his stead.
Alexander is exiled by insurgents.
Alexander is slain in a naval battle, and Lathyrus is recalled. Thebes rebels and is destroyed.
Lathyrus dies. Ptolemy XII. Alexander II. marries Cleo-

Ptolemy XIII. Neos Dionysos (or Auletes, the 'fluteplayer'), an illegitimate son of Lathyrus, ascends the throne, and is formally recognised by Rome (59).
Diodorus visits Egypt.
Auletes flies from Alexandria to Rome, but is reinstated
Auletes dies, leaving a will by which he appoints his eldest children -
Cleopatra VII. (pp. 9, 206) and Ptolemy XIV. Dionysos II. his joint heirs, commands them to marry each other, and nominates the Roman Senate their guardian. Pompey is appointed to that office.
Ptolemy XIV. banishes Cleopatra. Pompey, having been defeated by Cæsar at the Battle of Pharsalia, seeks an asylum in the territory of his wards, but on landing in Egypt is slain at the instigation of Ptolemy.
(p. 215), when six years of age, ascended the throne under the protectorate of his mother Cleopatra $I$.
48. Cæsar lands at Alexandria, takes the part of the banished Cleopatra, and defeats the rebellious Ptolemy.
47.

Ptolemy XIV. is drowned in the Nile.
Cæsar, having meanwhile become dictator of Rome, ap-
47.
44.
44.
42.
. Serapis at Rome.

98-117. Trajan (pp. 12, 206). The canal connecting the Nile with the Red Sea is re-opened (Amnis Trajanus).
116.

Rebellion of the Jews at Alexandria. Hadrian (pp. 12, 206) visits Egypt (twice according to some accounts).
136.
Termination of a Sothis period (comp. cix).
Marcus Aurelins.
Rebellion of the Bucolians, or cowherds of Semitic origin
who had long been settled among the marshes of the Delta,
quelled by Avidius Cassius.
Avidius Cassius is proclaimed emperor by the Egyptian
legions, but is assassinated in Syria.
Marcus Aurelius visits Alexandria (p. 12).
Demetrius, first Patriarch of Alexandria.
Commodus.
Septimius Severus. The philosopher Ammonius Saccas
founds the Neo-Platonic School.
Severus visits Egypt.
Edict prohibiting Roman subjects from embracing Chris-
tianity. The Delta at this period is thickly studded with
Christian communities. Schools of Catechists flourish at
Alexandria (Pantænus, Clement, Origen).
Caracalla (p. 12) visits Egypt. Massacre at Alexandria.
Caracalla is assassinated by the prefect of his guards -
Macrinus, who is proclaimed emperor by the Egyptians.
After his death a series of contests for the possession of the
throne take place at Alexandria.
Decius (p. 12).
Persecution of the Christians under Decius. Beginning of
the anchorite and monastic system, perhaps in imitation of
the hermit life led by the devotees of Serapis ( $\mathbf{p} .166$ ). The
history of these Christian ascetics (comp. pp. 137, 237) soon
came to be embellished with myths of every kind.
Valerianus. Persecution of the Christians (p. 13).
Gallienus accords religious toleration to the Christians.
Plague in Egypt.
Rebellion of Macrianus, who is recognised as emperor by
the Egyptians. He marches into Illyria against Domitian,
the general of Gallienus.
Emilianus (Alexander) is proclaimed emperor by the army
at Alexandria and recognised by the people, but is defeated
and put to death by the Roman legions.
Egypt invaded by an army of Queen Zenobia of Palmyra.
Claudius $I I$.
Aurelian.
Renewed invasion of the Palmyrenes. Zenobia recognised
as Queen of Egypt.
273. Zenobia dethroned. Insurrection of Firmus, a Syrian (p. 13). Invasions of the Blemmyes. Firmus defeated.

276-282.
278.

284-305.
292.
294.

295-296.
296.
304.

307-313.
324-375.
325.
328.
337.

337-361.

361-363.
373.

379-395.
395.

395-638.
395-408.

408-450.
413.
431.
444.

450-457.
451.

Probus obtains the purple at Alexandria (p. 13).
His successful campaign against the Blemmyes.
Diocletian (pp. 13, 15).
Rebellion in Upper Egypt.
Insurrection of the Alexandrians.
Diocletian takes Alexandria and marches to Upper Egypt. Erection of Pompey's Column (p. 15).
Persecution of the Christians.
Maximinus. Beginning of the Arian controversies.
Constantine the Great, first Christian emperor.
Council of Nice. The doctrine of the presbyter Avius of Alexandria (p. 13) that Christ was begotten by God before all time, and was godlike, but not very God, is condemned; while the teaching of Alexander, Bishop of Alexandria, to the effect that Father and Son are homousioi, or of the same nature, is sanctioned, chiefly owing to the powerful eloquence of his deacon Athanasius, who accompanied him to the Conncil.
Constantine founds Constantinople as a new metropolis of Greek art and science.
Death of Constantine.
Constantius favours Arianism. Athanasius is deposed, and Georgius, who is made Bishop of Alexandria, opposes the followers of Athanasius with the sword.
Julian, surnamed the Apostate from his renunciation of Christianity (p. 13).
Athanasius dies, after having spent the last years of his life in the midst of his flock.
Theodosius I. the Great. He formally declares Christianity to be the religion of the empire. Persecution of the Arians and heathens (pp. 13, 161).
Partition of the Roman empire, Arcadius being emperor of the East, and Honorius of the West.

## The Byzantines.

Arcadius permits Theophilus, the bigoted Patriarch of Alexandria (p. 13), to exterminate with fire and sword the opponents of the doctrine that God must be considered to have a human form.

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Theodosius II.
    Theophilus dies, and is succeeded by Cyril (p. 13).
            The view of the Patriarch Cyril, that Christ and the Virgin (as
                \eta}\mathrm{ (Esoróxos) possess a double nature, prevails over that of the
                Patriarch of Constantinople at the Third CEcumenical Council, held
at Ephesus.
    Death of Cyrin.
    Marcianus.
            At the Fourth CEcumenical Council, that of Chalcedon, the doc-
itrine of the archimandrite Eutyches of Constantinople, to the
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effect that Christ possessed a double nature before his incarnation, but that this hnman natnre was afterwards absorbed by his divine, is condemned, chiefly through the influence of Pope Leo the Great. At the same time the doctrine that Christ possesses two natures, $\dot{\alpha} \sigma u \gamma \chi u ́ t \omega s$ and $\alpha \tau \rho \varepsilon \pi \tau \omega s$, but at the same time $\dot{\alpha} \delta \iota \alpha เ \rho \leqslant \tau \omega s$
 tinguishable and inseparable, is formally accepted by the Church. The Egyptians, to this day, adhere to the monophysite doctrine of Eutyches.

## Zeno.

With a view to put an end to these doctrinal controversies, Zeno issued the so-called Henoticon, in which the question whether Christ possessed a single or a double nature was evaded. The doctrine stated, however, was so vague, that this attempt at reconciliation proved entirely fruitless.
Anastasius.
Famine in Egypt.
Insurrection of the Alexandrians on the occasion of the election of a patriarch.
Justinian (p. 13). New administration.
The emperor appoints a new orthodox patriarch. The Monophysites, who far outnumbered the orthodox party, separate from the dominant church and choose a patriarch of their own. They were afterwards called Copts (p. xlii).

## Heraclius.

The Persians under Chosroes invade Egypt (p. 13). Alexandria is taken. Chosroes rules with moderation.
The Persians expelled by Heraclius.

## Mohammedan Period.

'Amr Ibn el-‘Âsi, general of Khalif 'Omar (pp. 87, 207), conquers Egypt and founds Fostât.
${ }^{\text {'Amr enters Alexandria. }}$
${ }^{\prime}$ 'Omar is assassinated.
'Othmán. A number of Arabian tribes settle in the valley of the Nile, and many Copts embrace El-Islâm. Fostât becomes the capital of the new government.
'Othmân is put to death.
'Omayyades. The last of this dynasty was -
Merwan II., who, having been defeated by Abu'l-cAbbâs, fled to Egypt, and was put to death there. The Omayyades were then exterminated, with the exception of 'Abd erRahmân, who fled to Spain, and founded an independent Khalifate at Cordova.
The 'Abbasides govern Egypt.
Mâmůn (p. 142), the son of Harûn er-Rashîd, visits Egypt, promotes scientific pursuits of all kinds, and supports the school of learned men which had sprung up at Fosṭât.
Ahmed ibn Tulan, governor of Egypt (p. 35), profting by the weakness of the 'Abbasides reigning at Baghdâd, declares himself an independent sultan, and founds the
dynasty of the Tulunides. He extends the boundaries of Egypt beyond Syria and as far as Mesopotamia. Arabian writers extol Tulûn for his fabulous wealth and love of magnificence. Numerous buildings were erected during his reign (pp. 35, 56, et seq.).
Khumartyeh ( p .35 ), son of Tulûn.
The 'Book of Lands', a geographical work by Jarkûbi, published abont the year 891, informs us that Fostat occupied about one-third of the area of Alexandria at that period, that Alexandria was the most important commercial city in Egypt, that Ashmunên in Upper Egypt (see vol. ii. of the Handbook) was noted for its extensive cloth factories, Tinîs for its weaving and gold embroidery, Alexandria, Damyal, and Shata for their brocades and cloth of gold (dabiki, kasab, washy), the Fayam for its canvas (khêsh), Siat for its carpets, Akhmîm for its straw mats and leather-work, and Taha for its pottery. The chief export at that period, as in ancient times, was corn, which was chiefly sent to the Hijijaz.
The Ṭulunides are put to death by the 'Abbaside Khalîf Muktafi, who marched with an army to Egypt.
The Shî́ite Fâtimites, who had gained possession of the supreme power at Tunis, commanded by 'Obêdallâh, attack Egypt, but are defeated.
Mohammed el-Ithshîd, a Turk, and governor of Egypt, takes possession of the throne.
Kâfûr, a black slave, who had for a time conducted the government for the second son of El-Ikhshîd, usurps the throne, and recognises the suzerainty of the 'Abbasides.
Jôhar conquers Fostât for his master, the Fâtuimite Mu'izz, great-grandson of 'Obêdallâh. Mu'izz (p. 35) assumes the title of khalif and founds the city of Masr el-Kâhira (Cairo) near Fostât (p. 35). Egypt now becomes the most important part of the territory of the Fâtimites.
Fattimite sovereigns of Egypt. The earlier of these governed the country admirably. The population increased with wonderful rapidity, and the whole of the commerce of India, as well as that of the interior of Africa, flowed to Egypt.
Múizz dies.
'Aziz-Billah, his son, distinguishes himself by his tolerance and his love of science (p. 64).
Hakim (p. 72), El-Hâkim ibn ${ }^{\text {c }}$ Azîz, his son, is a fanatic and a sanguinary tyrant towards the rich, the great, and those woh differed from him in creed, but a benefactor to the poor. Subsequently, however, at the instigation of Ed-Darazi, a conning Persian sectary, he declares himself to be anincarnation of ${ }^{\text {cAli, and exacts the veneration due to a god. Ed-Da- }}$ razi becomes the founder of the sect of the Druses (see Baedeker's Palestine and Syria). El-Ḥàkim disappears, having probably been assassinated while taking one of his nightly

1021-1036. 1036-1094. 1074. 1077. 1094-1101. 1096.
1099.

1160-1171.
walks on the Mokattam hills. The Druses believe that he voluntarily withdrew from the world in consequence of its sinfulness and that he will one day re-appear as a divine prophet.
Zảhir, Hâkim's son, rules with sagacity.
Aba Tamim el-Mustanṣir, a weak and incapable prince. The country is ravaged by a pestilence. Bedr el-Jemâli, governor of Damascus. is summoned to Egypt tas chief vizier.
Mustali, son of Mustansir, conquers -
Jerusalem and the towns on the Syrian coast, but is deprived of his conquests by the army of the First Crusade.
King Baldwin of Jerusalem attacks Egypt unsuccessfully. 'Aḍid Ledinallâh, the last Fâtimite.
Contests for the office of vizier take place during this reign between Shawer and Dargham. The former, being exiled, obtains an asylum with Nureddîn, the ruler of Aleppo, who assists him to regain his office with Kurd mercenary troops, commanded by the brave generals Shirkuh and Salâheddin (Saladin). Shawer, quarrelling with the Kurds, invokes the aid of Amalarich I., King of Jerusalem (1162-73), who comes to Egypt and expels the Kurds. A second army of Kurds, which was about to invade Egypt, is driven back in the same way, whereupon Amalarich himself endeavours to obtain possession of Egypt. Shawer next invokes the aid of his enemy Nûreddîn, whose Kurdish troops expel Amalarich. Egypt thus falls into the hands of the Kurds Shirkuh and Ṣalâḥeddîn. Shawer is executed. Shirkuh becomes chief vizier, and on his death -
Şalâheddin (Salâheddî̀n Yûsuf ibn Eiyûb, p. 35), the Saladin of European historians, rules in the name of the incapable khalîf. On the death of the latter Șalâheddîn becomes sole ruler of Egypt, and founds the dynasty of the -
Eyyubides.
Şalâheddîn builds the citadel (p. 53) and old aqueduct of Cairo (p. 56). Being a Sunnite, he abolishes the Shîite doctrines and forms of worship.
After Nûreddîn's death he gains possession of the whole of that sovereign's Syrian dominions.
By the victory of Hittîn he overthrows the Christian kingdom in Palestine.
Melik el-Âdil, his brother and successor, preserves intact the dominions bequeathed to him; but the empire is dismembered at his death, and Egypt falls to the share of his son -
Melik el-Kàmil (pp. 216, 219), in whose reign the country began to play a prominent part in the history of the Crusades, as the Crusaders regarded the possession of Egypt as essential to the retention of Palestine.
1219. Damietta (Dumgaṭ) is captured by the army of the Fifth Crusade, but is compelled to surrender in 1221 (p. 219).
1219.

1240-1249.
1249.

1250-1380.
1260-1279.

1279-1290.
1289.

1290-1293.

Kâmil concludes a treaty with the Emp. Frederick II., who appears at the head of an army in Palestine, by which Jerusalem and the coast towns are surrendered to the emperor for 10 years.
While the sons of the last sultan are fighting with each other for the throne of Egypt, the Mameluke -
Melik ess-Şaleh usurps the supreme power, and founds the Mameluke Dynasty. ${ }^{+}$The Egyptians take Jerusalem, Damascus, Tiberias, and Ascalon.
Louis IX., the Saint, of France, roused by the loss of Jerusalem, and with a view to prevent the Egyptians from further encroaching on the Holy Land, undertakes a campaign against Egypt, takes Damietta (p. 220), but while marching to Cairo is captured along with his army at Mansûra, and is only released on payment of a heavy ransom.
Bafpite Mambluke Sultans. The first of these monarchs was Mu'izs Eibeg.
Bêbars, who had risen from being a slave to the position of leader of the Mamelukes, was one of the ablest of this dynasty. In the course of four campaigns he annihilates the last remnants of the kingdom of Jerusalem, and rules with sagacity, moderation, and justice. He brings to Cairo the last representative of the 'Abbaside khalifs, who had recently been dethroned by the Mongols, recognises his authority, and permits him nominally to occupy the throne.
Kalâan, el-Mansûr Kalâun (p. 70), succeeds to the exclusion of a youthful son of Bêbars, and successfully opposes the Mongols, who had invited Pope Nicholas IV., Edward I. of England, and Philip le Bel of France to undertake a new Crusade. Kalâûn enters into treaties with the Emperor Rudolph and other European princes. He conquers Tripoli, and makes preparations to wrest the fortress of 'Akka (Acre) from the Christians.
El-Ashraf Khalill (pp. 49, 70, 76), captures 'Akka, the last place in the Holy Land held by the Christians.

[^16]1293-1341. Nạsir, Mohammed en-Nâsir ibn Kalâûn (p. 36), succeeds his brother Khalîl at the age of nine years, and is compelled to retire to Kerak, a Syrian fortress to the $\mathbf{E}$. of the Dead Sea, in consequence of the sanguinary feuds that broke out
1294.
1296.
1299. among his viziers. Ketboga, the vicegerent, usurps the sceptre, but two years later is dispossessed by Lajinn, once a slave, who is said to have been a German by birth. Lajîn having been assassinated in 1299, Nâsir is recalled, but is still treated by his emirs as a youth under age, and the real rulers are Sallar, his chancellor, and Jashengir, the prefect of his palace. He therefore again withdraws to Kerak, and Bêbars 11. is proclamed sultan at Cairo in his stead. The Syrian emirs, however, remain faithful to Nâṣir, and with their aid, he speedily regains his throne. Distrust, vindictiveness, and cupidity soon show themselves to be prominent characteristics of Nâṣir, who treats his emirs with the utmost capriciousness, loading them with rich gifts or ordering them to execution as the humour seizes him. The emir Ismáil Abulfidâ, known also as a historian, succeeds, however, in retaining his master's favour till the time of his death. Towards the mass of the population Nâṣir is liberal and condescending, and towards the olergy he is indulgent. In order to provide the enormous sums required for the expenses of his court, his taste for horses, and his love of building, he appoints Christian officials in the custom-house and finance departments. As soon as the emirs perceive that his end is near, they seize upon his property with such prompt rapacity that not even a suitable pall to cover the corpse can be found. His miserable funeral takes place by night.
Hasan, Melik en-Nâsir Abu'l-Máâli Hasan ibn Kalâûn (p. 52), the sixth son of Nâsir, is still a minor when he ascends the throne. The lawless independence of the Mamelukes and emirs is aggravated by a plague in 1348-49 which exterminates whole families, whose property is immediately seized by the government. After having been dethroned in 1351.

1382-1517.
1382-1399. 1351, Hasan regains his sceptre three years later, but in 1361 he is assassinated
Circassian Mambluke Sultans (Burgites). The founder of this dynasty was -
Barkak (pp. 36, 70, 76), a Circassian slave, who succeeded in raising himself to the throne by setting aside Haggi, a boy of six years, and great-grandson of Mohammed en-Nâṣir. His accession to the throne, which had been the result of treachery and intrigues of every kind, so exasperated the emirs that they conspired against him and dethroned him in June, 1389. In Jan. 1390, however, after having defeated his enemies, Barḳ̂k celebrated his triumphal entry into

Cairo. He fought successfully against the Mongolians under Timur and the Osmans under Bajesid.
Farag (pp. 36, 76), his son, had scarcely ascended the throne, as a boy of thirteen years of age, before the Osmans, and a little later the Mongols, again began to threaten the Syrian dominions of the Egyptian empire. Farag proceeded victoriously as far as Damascus; but owing to dissensions among his emirs he was obliged to return to Cairo and leave Syria to its fate. After the defeat of the Turks under Bajesid by the Mongols under Timur at the battle of Angora, Farag wf compelled to enter into negociations with Timur. The latter years of Farag's reign were constantly disturbed by the rebellions of his emirs, particularly Shêkh el-Mahmûdi Muaiyad. He was at length compelled by the insurgents to capitulate at Damascus, whither he had proceeded with his army, and was executed (May, 1412).
El-Mahmadi Muaiyad (p.62), the victorious rebel, succeeded Farag. His reign was chiefly occupied with victorious campiagns against his unruly Syrian vassals, in which he was greatly aided by the military talents of his son Ibrâhim. His emirs were never sure of their lives, many of them having been imprisoned or executed on mere suspicion. As most of the public offices were sold to the highest bidder, his subjects were oppressed and maltreated by his judges and officials', who sought to indemnify themselves by practising all kinds of extortion. Notwithstanding all the misfortunes he brought upon Egypt by his maladministration and cupidity, Muaiyad had no lack of panegyrists, who remembered only that he was a pious Muslim, that he did penance for his sins by an occasional residence in a dervish monastery, and that he was distinguished as a theologian, an orator, and a poet. Towards religionists of other creeds he was intolerant in the highest degree.
He exacted heavy contributions from Christians and Jews, and he re-enacted and rigorously enforced the sumptuary laws of 'Omar (A.D. 634-44), Mutawakkil (849-50), the Fâtimite Khalif Hâkim ( $996-1020$; see p. 72), and Sulṭân Mohammed en-Nâsir (1293-1341; p. 70). Not only were the colours to be worn by the Christians and Jews preseribed (the costume of the former being dark blue, with black turbans, and a wooden cross weighing 5 lbs. hang round their necks; that of the latter, yellow, with black turbans, and a black ball hung from their necks); but the fashion of their dress and length of their turbans, and even the costume of their women, were so regulated as entirely to distinguish them from the followers of the prophet.
Bursbey (Berisbai; p. 78), who had for a time been the vicegerent of a young son of Tartar, ascended the throne on April 1st 1422. After having defeated some of his rebellious vassals, he attacked Cyprus, one of the chief hot-beds of piracy, and imposed an annual tribute upon its king. Burs-
bey was, however, less successful in his battles with the Turcoman Kara Yelek, who had allied himself with Timur, the prince of the Mongols. Bursbey attacked him in N. Syria in 1436, but was compelled by the refractory emirs to conclude a dishonourable peace. Shah Rah, the Mongol prince, then demanded the cession to himself of the privilege of sending to Mecca the materials for the covering of the Kabra, a right which had belonged to the sultans of Egypt since the decline of the khalifate of Baghdâd, but Bursbey was successful in resisting this claim. He also defeated the Sherîf ot Mecca, and thus became the protector of the holy city, while the possession of Jedda, the seaport of Mecca (p. 201), afforded him great commercial advantages. He died a natural death in 1438.
Kait Bey (pp.58, 64, 78) was one of the last independent Mameluke sultans of Egypt. Both as a general and a diplomatist he successfully maintained his position against the Turks (Sultans Mohammed and Bajazid), and even inflicted serious losses on them; but the refractory Mamelukes obstructed his undertakings and in 1496 compelled him to abdicate in favour of his son Mohammed, a boy of fourteen.
El-Ghuri, Kansuweh-el-Ghûri (p. 63), once a slave of Kàìt Bey, was upwards of sixty years of age when he ascended the throne, but he still possessed considerable vigour and energy. He kept the unruly emirs in check, and neutralised the influence of the older Mamelukes by the purchase of new slaves. He was as great a lover of splendour as if he had belonged to a princely family. His stables contained the finest horses in Egypt, his rings the most precious jewels; his dinner service was of the purest gold, and his palace and citadel were the resort of poets, minstrels, and musicians. He improved the roads and canals of Egypt, founded schools and mosques, and constructed fortifications; but in order to accomplish all this, he imposed burdensome taxes on his people. On one occasion he levied a subsidy on all landed property in Egypt and Syria amounting to the value of ten months produce. Already seriously injured by the discovery of the Cape route to India by the Portuguese, the trade of Egypt was terribly depressed by these high taxes and by the accompanying debasement of the coinage. Having at length been made aware by the Venetians of the dangers which threatened his country, Kanṣuweh el-Ghûri endeavoured to protect its commerce by equipping a fleet for service against the Portuguese in India, and with it in 1508 he gained a naval victory over Lorenzo, son of the viceroy Francisco d'Almeida, near Shawl in Beluchistan; but the following year his fleet was compelled to retreat to Arabia in a shattered
condition. El-Ghûri fell, while fighting against the army of the Osman sultan Selîm I. on the plain of Dâbik (to the N. of Aleppo).
1517.
1771.
1773.

1798, 1st July.

2nd Jnly. 13th Jnly. 21st Jnly. 1st Ang.

3-25th Sept. Insurrection at Cairo quelled.

[^17]1799, Jan., May. 25th July. 24th Aug.
1800, 21st Mar.

## 14th June.

 1801, Sept.1803. 

1805-1848.
1811.
1831.
1832.
captures 'Akka (27th May, 1832), Damascus (8th July), and Haleb (21st Dec.), destroys the Turkish fleet at Kônyeh (Iconium), and threatens Constantinople itself. His victorious career, however, is terminated by the intervention of Russia and France. Syria is secured to Moḷammed by the peace of Kutâhyeh, but he is obliged to recognise the suzerainty of the Porte. At the instigation of the English, Sulțân Mahmûd renews hostilities with Egypt, but is decisively
1839.

Central and Upper Egypt conquered.
Defeat of the Turks at Abukîr.
Napoleon returns from Alexandria to France, leaving General Kléber in Egypt.
Kleber defeats the Turks at Matarîyeh (p. 127).
Kléber is assassinated at Cairo (p. 37).
The French are compelled by an English army to capitulate in Cairo and Alexandria, and to evacuate Egypt.

## Mohammed 'Ali and his Successors.

In the year 1803 the French consul Matthieu de Lesseps was commissioned by his government to seek for some suitable man to counteract the influence of the English and the Mamelukes in Egypt, and he accordingly recommended for the purpose Mohammed 'Ali, who was born at Kavala in Roumelia in 1769 , and who was at that period colonel (bimbashi) of an Albanian corps of 1000 men in Egypt.
Mohammed 'Ali, having succeeded in removing most of his enemies, is appointed Pasha of Egypt. In 1807 he frustrates an attempt of the English to take possession of Egypt, and on 1st March, 1811, causes the Mameluke beys, who prevented the progress of the country, to be treacherously assassinated, together with their followers ( 480 in number). His son, Ṭusôn Pasha, wages a successful war against the Wahhabites in Arabia, and deprives them of Mecca and Medina. Mohammed improves the agriculture of Egypt by introducing the cotton-plant, and by restoring the canals and embankments, appoints Frenchmen and other Europeans to various public offices, and sends young Egyptians to Paris to be educated. During the Greek war of independence he sends 24,000 men to the aid of the sultan, as a reward for which he is presented with the island of Candia at the close of the war. In 1831, aiming at complete independence, he makes war against the Porte. His adopted son Ibrâhîm invades Syria, and defeated by Ibrâhîm at Nisibi on 24th June, 1839. In con- sequence of the armed intervention of England and Austria, however, Ibrâhîm is compelled to quit Syria entirely, and Mohammed is obliged to yield to the Porte a second time.
1841. By the so-called firmân of investiture in 1841 Sultân Abdu'lMedjid secured the hereditary sovereignty of Egypt to the family of Mohammed 'Ali, the pasha renouncing his provinces of Syria, Candia, and the Hijàzz, and binding himself to pay an annual tribute of 60,000 purses (about $306,000 l$.) to the Porte and to reduce his army to 18,000 men. During the last years of his life Mohammed fell into a state of imbecility, and died on 2nd Aug., 1849, in his palace at Shubra.

Ibrâhim Pasha, Mohammed 'Ali's adopted son, had already taken the reins of government, in consequence of Mohammed's incapacity, in Jan., 1848, but he died in November of the same year, and before his adoptive father.
'Abbâs I. Pasha, a son of Tusûn Pasha and grandson of Mohammed 'Ali, has generally been described by Europeans as a brutal, vicious, and rapacious prince. This, however, would seem to be a somewhat distorted view of his character, arising from the fact that he had inherited from his Arab mother a certain amount of ferocity and even cruelty, coupled with the dislike of a true son of the desert for European innovations. He, however, maintained the strictest discipline among his officials, and the public security in Egypt was never greater than during his reign. His death is attributed to assassination.
Sa'id Pasha, his successor, was Mohammed 'Ali's third son. He equalised the incidence of taxation, abolished monopolies, improved the canals, completed the railways from Cairo to Alexandria and to Suez, and, above all, zealously supported the scheme of M. Ferdinand de Lesseps for constructing a canal through the Isthmus of Suez, which was opened in 1869 under his successor. During the Crimean war he was obliged to send an auxiliary army and considerable sums of money to the aid of the Porte. He died on 18th Jan., 1863, and was succeeded by his nephew -
Ismá'il Pasha, the second son of Ibrâhîm Pasha, who was born on 31st Dec., 1830. He had received the greater part of his education in France and had there acquired the strong preference for European institutions which characterised him throughout his reign. Unfortunately, however, he combined with this enlightenment a profound egotism and a tendency to duplicity and cunning, which in the end, in spite of his natural talents, proved his ruin. Most of his innovations, such as the foundation of manufactories and the construction of canals, railways, bridges, and telegraphs, were planned mainly in his own interest, though of course the country shared in the advantage, while even in the establishment of schools, the reorganisation of the system of justice ( $\mathbf{p} . \mathrm{xx}$ ), and the like, he acted rather with an eye Baedeker's Egypt I. 3rd Ed.
to produce an impression in Europe than from real concern for the needs of his subjects. As time went on he succeeded in appropriating for his own use about one-fifth of the cultivabIe land of Egypt. In 1866, in consideration of a large sum of money, he obtained the sanction of the Porte to a new order of succession based on the law of primogeniture, and in 1867 he was raised to the rank of Khedive, or viceroy, having previously borne the title of wâli, or governor of a province only. In 1873 the Khedive obtained a new firmàn confirming and extending his privileges (independence of administration and judiciaries; right of concluding treaties with foreign countries; right of coining money; right of borrowing money; permission to increase his army and navy). The annual tribute payable to the Porte was at the same time raised to 133,635 purses (about $681,538 l$.). With regard to the warlike successes of the Khedive and the extension of his dominions, see pp. xxxii, xxxiii. - The burden of the public debt had now increased to upwards of 100 mil lion pounds, one loan after another having been negotiated by the finance minister Isma'il Siddîk, who finally became so powerful that the Khedive deposed him in 1878 and caused him to be secretly put to death. The Powers now brought such a pressure to bear on the Khedive, that he was compelled to resign his private and family estates to the state and to accept a ministry under the presidency of Nubar Pasha, with the portfolio of public works entrusted to M. Blignières and that of finance to Mr. Rivers Wilson. This coalition, however, soon proved unworkable; Nubar Pasha quitted the ministry in consequence of the Khedive's encouragement of a rising among the disbanded officers of the army, and early in 1879 the whole cabinet was replaced by a native ministry under Sherît Pasha. The patience of the Great Powers was now at an end; and on the initiative of Germany they demanded from the Porte the deposition of Ismaril, which accordingly took place on June 26 th.
Isma'il was succeeded by his son Tewfik (pronounced Tevfil) or Taufik, under whom the government was carried oul in a more rational spirit, especially after Riaz Pasha became the head of the ministry. The debts were regulated, an international commission of liquidation was appointed, and an extensive scheme of reform was undertaken. In Sept., 1881, however, a military revolution broke out in Cairo, which had for its objects the dismissal of the ministry, the grant of a constitution, and above all the emancipation of Egypt from European influences. The Khedive was besieged in his palace and had to yield; he appointed Sherîf president of a new ministry and arranged for an election of Notables,
or representatives. As the latter espoused the 'national' cause, Sherîf resigned in Feb., 1882, and Maḥmûd Pasha formed a new ministry, the programme of which tallied exactly with the demands of the national party. The new cabinet, the soul of which was Arabi Bey, the energetic minister of war, at once proceeded, without receiving the consent of the Khedive, to pass several measures intended to diminish the European influence in the political and financial administration of the country. The consuls general were assured that no danger threatened the Europeans, but were also told that any foreign intervention in the internal affairs of Egypt would be resisted by force. The Khedive, to whom both France and England had promised protection, declared that he would offer a determined resistance to the measures of the cabinet. At the end of May the British and French fleets made their appearance before Alexandria. In the middle of June serious disturbances broke out in that town, in the course of which many Europeans were killed, while the others found refuge on board the ships. On July 11 th and 12 th Alexandria was bombarded by the British fleet, and on Sept. 13th the fortified camp of Arabi at Tell el-Kebîr was stormed by a British force under Sir Garnet Wolseley. Arabi and his associates were captured and sent as exiles to Ceylon. Since these events British influence has been paramount in Egypt. In the autumn of 1883 a widespread rebellion broke out among the Nubian tribes of the Sûdàn under the leadership of Mohammed Aḥmed, the so-called 'Mahdi' ( $\mathrm{p} . \mathrm{xovii}$ ), which proved fatal to the Egyptian supremacy in the Sûdân. An Egyptian army of 10,000 men under an Englishman named Hicks Pasha was annihilated in Nov., 1883, by the Mahdi's forces, and a second expedition of 3500 regular troops of the Egyptian army, led by Baker Pasha, was also completely defeated at Tokar in February, 1884. On the 18th of the same month General Gordon, who had been Governor General of the Sûdân in 1877-79, after a perilous ride across the desert, entered Khartûm, which he had untertaken to save from the Mahdi; while on Mar. 1st and Mar. 13th the rebel tribes under the Mahdi's lieutenant Osman Digna were defeated at El-T'eb and Tamanieb by the British troops under Graham. The Mahdi himself, however, still maintained his position near Kharțum, and towards the close of the year a second British expedition (of 7000 men) was sent out under Wolseley to rescue Gordon.

Wolseley selected the tedious and laborious Nile route for this expedition in preference to the shorter but more dangerous desert route from Suâkin to Berber. An advanced
1885. | brigade under General Stewart was, however, sent on from Korti at the beginning of 1885 , which accomplished its march across the Bayûda Desert (see Map, p. xxxii) with complete success, gaining severely contested victories over large bodies of the Mahdi's followers at Abu Klea (Jan. 17th) and at a point near Metemmeh (Jan. 19th). Stewart, however, was mortally wounded at the latter engagemeut. The British reached the Nile at Gubat, just above Metemmeh, on the evening of Jan. 19th, and on Jan. 24th a small body of meu under Sir Chas. Wilson set out for Khartûm in two steamboats which Gordon had sent to meet them. Sir Charles reached Khartûm on the 28th, but found that it had already fallen on the 26th, apparently through treachery, and that Gordon had perished. All thoughts of reconquering the Egyptian Sûdân from the Mahdists were abandoned, and Wâdi Halfa has remained the S. limit of the Khedive's dominions ( $p$. xxxiii). Though Suâkin became the basis of more or less desultory operations against Osman Digna, the British devoted their chief attention to developing and improving the admirristration of Egypt proper. Negotiations on the part of the Porte, instigated by France and Russia, to bring the British occupation of Egypt to a close, have hitherto proved fruitless. A loan of $9,000,000 \mathrm{l}$. was raised by the British
for the purpose of regulating the Egyptian finances. In 1887 a convention with France established the unconditional neutrality of the Suez Canal.
The Khedive Tewfik died on January 7th, 1892, and was succeeded by his eldest son Abbas II. Hilmi (b. July 14th, 1874), whose accession was confirmed by a firmân of the Porte, dated March 26th, 1892.

## V. Hieroglyphics.

By Professor G. Eber's of Leipsic.

The aucient Egyptians used three kinds of writing, the Hieroglyphic, the Hieratic, and the Demotic, to which, within the Christian era, was added the Coptic. The first and earliest is the pure Hieroglyphic writing, which consists of figures of material objects from every sphere of nature and art, together with certain mathematical and arbitrary symbols. Thus 0 wl , ๆaxe, $\square$ square, \& ? senti. This is the monumental writing, which is oftener found engraved on stone than written with a pen. For the speedier execution of long records the Egyptians next developed the Hieratic writing, in which the owl (3, i.e. B) almost ceases to be recognisable, and in which we possess literary
works of every kind except dramas. The most ancient hieratic papyrus now extant was written in the third millennium before Christ. The language used in the hieroglyphic and hieratic writings alike was the ancient sacred dialect of the priests. The Demotic writing, which was first employed in the 9 th century before Christ, diverges so widely from the hieroglyphic that in some of the symbols the original sign from which they were derived is either not traceable, or can only be recognised with difficulty. The sign of the owl, for example, was curtailed to $>$. This writing was chiefly used in social and commercial intercourse; as, for example, in contracts and letters, whenceitwas sometimes termed the 'letter character' by the Greeks. The more the spoken language diverged from the sacred dialect, which assumed a fixed form at a very early period, the more urgent became the want of a new mode of writing appropriate to the living language. Thus arose the demotic style, and lastly, in the 3rd century after Christ, the Coptic, in which the language spoken at that time by the Christian Egyptians was written, the characters being Greek, with a few supplementary symbols borrowed from the demotic (such as $\boldsymbol{\Psi} s h, ~ ¢ f, \$ c h$, $\boldsymbol{2}^{h}, \sigma_{c}, \times j$, and the syllabic $\left.\boldsymbol{f}_{t i}\right)$. Many Coptic writings, chiefly of a religious character, have been handed down to us, the finest of them being the books of the Old and New Testament.

Down to the end of the 18th century scholars had been misled in their endeavours to find a clue to the hieroglyphic writing by a work of the Egyptian grammarian Horapollon, translated into Greek, who represented the characters as being purely symbolical, and as having each an independent meaning of its own. At leugth in 1799 M. Boussard, a French officer of artillery, discovered at Rosetta a trilingual inscription (pp. 225 et seq.), in hieroglyphic and demotic characters and in Greek. The demotic part of the inscription was examined by M. Silvestre de Sacy, a French savant, and Hr. Akerblad, a Swede, in 1802, and, chiefly owing to the exertions of the latter, the signification of a number of the symbols was ascertained. In 1814-18 the hieroglyphic part of the inscription was studied by Dr. Th. Young, an English scholar, who, by comparing it with the demotic part, succeeded in dividing it into a number of corresponding groups, and, by directing his attention to the cartouches (p. cxxxix), discovered the signification of several of the hieroglyphic symbols. In 1821 Francois Champollion, usually surnamed Le Jeune, who possessed an intimate acquaintance with the Coptic language and literature, directed his attention to the hieroglyphics, and in the course of the following year discovered the hieroglyphic alphabet, which afforded him a clue to the whole of the ancient Egyptian literature. His method, which he has explained in his hieroglyphic grammar, though at first vehemently opposed, soon obtained able adherents, who after his early death in 1832 zealously took up and prosecuted the same line of research.

Among these were the French savants MM. Ch. Lenormant, Nestor l'Hồte, and Emmanuel de Rougé, the last of whom was the first to translate with philological accuracy a hieroglyphic text of any length, and the Italian scholars MM. Salvolini, Ungarelli, and Rosellini. The most distinguished English Egyptologists of the same school are Mcssrs. Osburn and Hincks, and Dr. Birch, who compiled the first complete dictionary of the ancient language, and translated numerous inscriptions. The celebrated German Egyptologist Prof. Richard Lepsius (d. 1884) is another of the chief workers in the field of hieroglyphics, while Prof. H. Brugsch has led the way to a complete interpretation of demotic texts. Thanks to the discoveries of these savants and others of the same school, the time is probably not far distant when students will be able to translate a hieroglyphic inscription with as great philological accuracy as the work of a Greek or Latin author.

A glance at a single temple wall, or even at the annexed list of the names of the Egyptian kings, will show the traveller that we have not to deal here with an alphabetical mode of writing, the signs (about 2000 in number) being far too numerous. The ancient Egyptian writings were based on two different, but intimately connected systems: (1) the Ideographic, which, by the use of well-known objects as symbols of conceptions, sought to render its meaning intelligible to a certain class of the community; and (2) the Phonetic, which represents words by symbols of their sounds. Although we cannot now trace the rise and progress of hieroglyphic writing, as even the earliest specimens manifestly belong to an already perfected system, we may at least safely assert that the ideographic element preceded the phonetic; for, as a child employs gestures earlier than speech, so nations use a symbolical form of writing before they arrive at a method of expressing sounds. The newer and more serviceable phonetic system must ultimately have superseded the ideographic, although occasionally calling in its aid as an auxiliary. In the perfected system, therefore, the symbols for sounds and syllables are to be regarded as the foundation of the writing, while symbols for ideas are interspersed with them, partly to render the meaning more intelligible, and partly for ornamental purposes, or with a view to keep up the mystic character of the hieroglyphics.

The Phonetic signs are divided into alphabetic letters, such as

 syllable signs may, in order to fix their sounds with greater precision, have as 'phonetic complements' one, several, or all of those sounds which the name of the syllable representing the sign in
question contains. Thus $f$, which stands for ânkh, may also be represented by
(1)

(2)

(3) $\frac{\square}{\text { mun }} \frac{\square}{1}$
or (4) $?^{\mathrm{mm}}$.
. The reading is, however, facilitated by the fact that, in order to ensure the correct pronunciation of each syllabic sign, none but the most definite sounds were added to it. The symbol شس men, for example, is never written
 figures. The ideographic signs, or determinatives, are placed as explanatory adjuncts after the phonetically written groups. They are indispensable in elucidating the signification, for the Egyptian language, having been arrestedinits development, is poor, and full of homonyms and synonyms. The symbol mum ankh, for example, means 'to live', 'to swear', 'the ear', 'the mirror', and 'the goat'. The reader would easily fall into errors, such as mistaking ankh nefer for 'a beautiful life' instead of 'a beautiful goat', if the determinative, or class, sign did not come to his aid, and show to what category of ideas the object belonged. Thus, after ânkh, the goat, the Egyptians either placed a figure of that animal, or a piece of hide with a tail , which served as a common symbol for all quadrupeds. The symbol used to represent a particular word is termed a special, while one chosen to denote a class is termed a general, determinative. An elephant $\mathrm{V}_{\mathrm{ar} \times \mathrm{m}}$ placed after the group of [ــ $\quad$ ], $\bar{b} b$, 'the elephant', is a special determinative, while a lock of hair placed after senem, 'the mourning', is a general determinative, a lock of hair being the conventional emblem of grief, as the men were in the habit of cutting off their hair in token of sorrow. A word is frequently followed by several determinatives. Thus an ar ar is 'the cedar'; but the wood of the tree being scented, the group representing $\bar{a} s h$ was not only followed by the figure of a tree $\cap$, but also by the symbol $\mathbb{D}$, which signifies that a perfumed object is spoken of. The special determinative always precedes the general. Symbols that were not capable of being very clearly engraved on stone were sometimes omitted, and the special determinative given alone. Instead of
 such cases we know the sense of the word，while its pronunciation must be gathered from other and fuller forms of it ．The following words，which are written in various ways，may be given as an illustration．


In the first of these groups 48 ahu corresponds to the Coptic cqoor ehou，and signifies bullocks，as the determinative symbol约 shows．（The three strokes are the sign of the plural．）In the next place 111 apet－$u$ signifies geese，and is determined by the figure of that bird．Lastly $\downarrow \stackrel{\square}{\square} \operatorname{arp}$（Coptic нрпI，erp）means wine，and is associated with the general determinative ，i．e．the jars in which the juice of the grape used to be kept．In the second form of the sentence the syllabic writing is omitted，and the plural， instead of being denoted by three strokes，is expressed by the repe－ tition of the special determinative．This leaves no doubt as to what is meant，while the first form gives us the actual words．

We now give the most important symbols of sound of the an－ cient Egyptian writing，and also a few syllabic signs．

## Hieroglyphic Alphabet．



2． 4 a．
3. $\qquad$
4．$\sqrt{2} \mathrm{~F}$ ．
5．\＆f．
6．回 b ．
7． 8 b ．

8． 11 i ．
9． $44 \bar{i}$
10.


11．$\Delta \Delta \mathrm{q}_{\mathrm{or}}^{\mathrm{k}}$ ．
12．会边 1 ．
13.


14．MMM， ， C
15．$\square \mathrm{p}$ ．

16．$\triangle$ q．
17.


18．$ी, \ldots \mathrm{~s}$ ．
19．$\square$ $100^{\circ}$ $\mathrm{s}(\mathrm{sh})$.
20．$\triangle \mathrm{t}$ ．
21．$\rfloor, ~(t h)$ ．
22.

23.

24. S，©


Important Syllables in Annexed List of Kings．

1．men．
2．$ڭ^{n o f e r}$ ．
3．$\odot \cdot \vec{a}$ ．
4． $8 k h a$.
5．Lل ka or qa．
6．$\{u$ user．

8． $\int \dot{d} n$ ．
9． 2 分
10. （4）kheper．

11．$\longrightarrow$ neb．
12．E）peh．
13．$\dot{a} h, \dot{a} b, \dot{a}$ ．

15．$\|^{\text {mes．}}$

16．Fin Hor（the god Horus）．
17．$\wp$ heb．
18.


19．$\longleftrightarrow \vec{a}-a, a$ ．
20．$\downarrow$ mer．
21．$\ddagger s u$ ．
22．$\sqrt[8]{6} M a \hat{a}$（goddess of truth）．
23．


24．$\frac{2}{5}$ or $O$ sin，the son．
25． $\int$ sotep（approved）．
26．$R a(g o d$ of the sun）．
27． 4 等 $A m$（the god Ammon）．
28．用 Ptah（the god Ptah）．
29．范为 $b a$ ．

30．hotep．
31．$工$ me and mer．
32．$\{h a k$.
33． $\int \|$ an（On，Heliopolis）．
34．$\Longleftarrow t a$ ．
35． 9 nuter．
36． $\iint_{0}^{0}{ }^{\text {ase }(t)}$（Isis）．
37.


38．登 $s a$ ．
39．$\square_{\Omega}^{\mu} N e t$（goddess Neith）．
40． 8 uah．
41． $8 a b$ and $a h t i$ ．
42．$\overline{5}$ त्र $k a$ ．

43．$\frac{\text { an }}{}$ akl．
44．$\rightarrow$ nekht．
45． 87 rut．
46．oflo $b a$ ．
47．分 menkh．
48.


49． 4 sen．
50.


51．A khu．
$52 . \times s e b, t u a$ ．
53．人িजा nub．
54．$\Rightarrow$ maá．
55．sebek．
56．シ hem．

The form of the hieroglyphic signs is not invariable．Dur－ ing the primæval monarchy they were simple and large，while under the new empire they diminished in size but increased in number．The writing of the reigns of Thothmes III．and of Seti I． （18th and 19th dynasties）is remarkably good．In the 20th and fol－ lowing dynasties the hieroglyphics show symptoms of decadence． The writing of the $24-26$ th dynasties is distinct and elegant，but has not the boldness peculiar to the primæval monarchy．Under the Ptolemies the symbols acquired characteristics peculiar to this period alone，while many new hieroglyphics were added to the old；the individual letters are，as a rule，beautifully executed， but the eye is offended by their somewhat overladen and cramped style．The method of writing，too，is changed．The phonetic element makes large concessions to the ideographic，and acrophony
becomes very'predominant: i.e., a number of symbols are used to stand for the first letter only of the word they represent. Thus the syllabic symbol $\operatorname{ser}$ ('the prince') is used for the letter $s$ alone; De nehem ('the lotus-bud') for $n$ alone; and so on.

The frames within which the groups of hieroglyphics are enclosed $\longrightarrow$ are termed 'cartouches'. Where they occur, the inscription generally records the names of kings, and occasionally, but very rarely, those of gods. Above them usually stands the group

suten sekhet, i. e. 'King of Upper and Lower Egypt', or
neb taui, 'sovereign of both lands', or $\longrightarrow \overbrace{\| 1}^{8}$ neb lehâ-u, 'lord of the diadems'.

When the name of a king is to be deciphered, the alphabetical signs must first be noted, and then the syllabic symbols. The following examples will illustrate this.

The builder of the great pyramids is named -


The builder of the second pyramid was


Khafra. Here $\odot$ is the 3 rd syllabic sign $r a ; ~ Q$, the 4th syllabic sign $k h a$; x the letter $f$. This would give us râ-khâ- $f$; but it is to be read kh $\hat{a}-f$-râ, or Khafra, as the syllable ra, whereever it occurs in the name of a king, is always placed first without regard to its proper place in the structure of the word. This was done out of respect for the holy name of Ra , the god of the sun, to which the Egyptians thus piously gave precedence. On the same principle the name of the builder of the Third Pyramid, $\odot(3)$, (1), and $L$ (5), or ra-men-lca, is to be read Menkara or Menkera. - Several celebrated kings of the 18th Dynasty are termed


Now
 is the 14th syllabic sign tehuti or thut, $\|_{\|}$the 15 th syllabie sign mes, and $\|$ the 18 th alphabetical letter, which is added as a phonetic complement to mes. The name is therefore to be read Tahut-mes or Thut-mes, the Greek form of which was Tuthmosis (commonly known as Thothmes).
VI. Frequently recurring Names of Egyptian Kings. $\dagger$


Amenemha II. 12.


Usertesen II. 12.
Usertesen III. 12.

Amenemha III. 12.
Amenemha IV. 12.



Ramses II., favourite of Ammon, and his father Seti I.,



Ramses VIII. 20.
Ramses IX. (Leps. Ramses X. (Leps.
Ramses XI. (Leps.


Ramses XII.) 20.


Ramses XII. (Leps. Sheshenk (Sesonchis) I. $22 . \quad$ Sheshenk IV. 23.



Psammetikh I. 26. Nekho 26. Psammetikh II.26.


Uahphrahet (Uaphris. Hophrah). 26.


Alexander 1. 32.


Kambatet Ntariush Aahmes II. (Ama- (Cambyses) sis). 26.


(Darius)
27.


Philippus Ari-

## Ptolmis (Ptolemy I. Soter). 33.



Ptolemy II. Philadelphus I. 33.


Queen Arsinoë. 33.



Ptolemy IX. Euerge-
tes II. (Physcon).
33.


Six Ptolemaic princesses of the name of Cleo-
patra ocenr patra occur.


Ptolemy X. Soter II. or Philometor II. usually known as La-


Cleopa: tra V1.,

mistres of Car-Anto\begin{tabular}{l}
ny. <br>
$\mathbf{3 3}$. <br>
\hline

 

8 <br>
$\Delta$ <br>
0 <br>
8 <br>
0 <br>
0 <br>
0 <br>
0 <br>
\hline
\end{tabular}

Cleopatra VI., with Cæsarion, her son by Cæsar, and


Cæsar Au-
gustus 34.


Tiberius.


Domi tian. 34.


Trajan. 34.


Hadrian. Antoni-
34. nus


Aurelius. Commo-
34. dus. 34.


Severus. Antoninus. Geta. Decius.
34. (Caracalla).
34.
34.



## VII. Religion of the Ancient Egyptians.

The difficulty of thoroughly comprehending the fundamental ideas which underlay the religion of the ancient Egyptiaus is increased by two important circumstances. The first of these is, that the hierarchy of Egypt studiously endeavoured to obscure their dogmas by the use of symbolical and mysterious language; and the second is, that each nome possessed its own local divinity and colleges of priests, and invented its own cosmological and metaphysical allegories. This accounts for the differences of doctrine in a number of forms of worship bearing the same name, and for the frequency with which the attributes of one god trench on those of another. The primitive religion, moreover, underwent great changes as the capacity of the hierarchy for more profound speculation increased, until at length the relations of the divinities to each other and to the fundamental ideas represented grew into a complicated system, understood by the limited circle of the initiated alone. This was styled the Esoteric Doctrinet, the leading idea of which was, that matter, though liable to perpetual modifications, was eternal and fundamentally immutable, incapable of increase or decrease, but endowed with intelligence and creative power. In the opinion

[^18]of those who held this doctrine there could be no original act of creation, and no plurality of gods; but a metaphysical conception so difficult of apprehension could not be propounded to the great body of the people. For the use of such persons it was, therefore, simplified, and clothed with allegorical forms, through the medium of which they might behold it as through a veil, somewhat obscured, but at the same time embellished and shorn of its terrors. This constituted the Exoteric Doctring, with which was connected the theogony, or theory of the origin and descent of the divinities who represented the various forces and phenomena of nature. These gods, however, though not existent from all eternity, were neither created nor begotten, but were regarded as having been self-created in the wombs of their own mothers, and are therefore spoken of as 'their own fathers', 'their own sons', and the 'husbands of their mothers'. The deities accordingly are seldom spoken of as single individuals, butintriads, as father, mother, and son (comp. p. clii).

The primary source from which all life proceeds, the first cause of all things, was clothed with a personal form, called Nun. The principle of light, and the creative power of nature, which implants in matter the germs of existence and light, was Khepera, or the scarabæus with the sun's disk, whose emblem was the beetle (scarabaeus sacer). As that insect rolls up into a ball the eggs which produce its offispring, and was supposed to have no female, so this deity was believed to have concealed within the globe of the world the germs of organic life. Ptah is the greatest of the gods, and is the embodiment of the organising and motive power developed from moisture (Nun). It is he who imparts form to the germs sown by Khepera, and under the name of Sekhem Nefer breaks the ball rolled along by the scarabæus, or in other words the egg of the universe, from which emerge his children, the elements and the forms of heaven and earth. Ra, a deity who bears seventy-five different forms, at first appears in the Nun under the name of Tum, or the evening sun; during his passage through the lower hemisphere, that of night, he is known as Khnum, and is born anew on the next morning of the creation, bursting forth in the form of a child (Harmachis) from a lotus-flower floating on the Nun. Evening and night precede the morning and day; and Amenthes, or the infernal regions, were believed to have existed before the upper regions which formed the scene of human life.

After the breaking of the egg of the world, the universe is resolved into three empires: - (1) The heavenly Nut, represented as a woman , bending over the earth, on whose back float the vessel of the sun, the planets, and the constellations. (2) Seb, or the earth, which possesses the power of eternal rejuvenescence, and was regarded by the Egyptians as the symbol of eternity, a deity somewhat resembling the Greek Chronos. (3) The Infernal Regions, which are presided over by Ptah, the power productive of
new forms, the germinating principle of seeds, and god of light and heat (sometimes represented in the shape of a deformed child), and, after him, by Ra, who appears from the inscription on the royal tombs at Thebes to have been a purely pantheistic conception, the 'frame of the universe' and 'the universe', and whose sphere therefore embraced the lower as well as the upper regions. (See also Ra and Ammon.)

The Sacred Animals and the Mixed Forms, which generally consist of human bodies with the heads of animals, frequently recur as companions of the gods, or are used as emblems of the deities themselves. In each case those animals were selected whose inherent dispositions and habits corresponded to the power or phenomenon of nature personified in the god. Specimens of these animals were kept in and near the temples, and the finest of them were embalmed after death and revered in the form of mummies. Thus, the maternal divinities were appropriately represented by the cow, the patient mother and nurse; the goddess of love, the bride of Ptah, was represented with the head of a fierce lion or a cat; the crocodile was sacred to Sebek, the god who caused the waters of the Nile to rise; and the hawk, which soars towards heaven like the sun, was dedicated to Ra. The symbol of Ptah was the black Apis bull, whose great power of generation seemed analogous to the never-ceasing creative energy of the black soil of Egypt.

The Egyptian Gods. The chief of the gods, as we have already mentioned, was Ptah, the Greek Hephæstus. He was the ancient god of Memphis, who delivered to Ra the germs of creation, and was assisted in his labours by the seven Khnumu or architects. As from him were supposed to emanate the laws and conditions of existence, he is also styled 'lord of truth'. He is represented in the form of a mummy, but with his hands protruding from the
 and the sceptre $\mathfrak{~}$. The neck-ornament called 'menat' is generally attached to his back, and on his head he usually wears a smith's cap. He sometimes occurs with a scarabæus instead of a head. In view of his connection with the doctrine of immortality and with the infernal regions, he sometimes appears in the inscriptions as Ptah-Sokar-Osiris, who prescribes to the sun that has set, as well as to the mummies of the dead, the conditions under which they may rise again and enter on a new life. The 'primæval Ptah' is also spoken of as the head of the solar gods, and also occasionally as the creator of the egg, from which, according to an older myth, the sun and the moon came forth. Thence, too, is derived his name, which signifies 'the opener'. By his side are often placed the goddess Sehhet (Pasht), and his son Imhotep (Asculapius).

His sacred animal was the Apis bull, which was the offspring
of a white cow impregnated by a moonbeam. In order to represent Apis worthily, a bull had to be sought which possessed a black hide, a white triangle on his forehead, a light spot on his back in the form of an eagle, and under his tongue an excrescence shaped like the sacred scarabæus. After his death the representative of Apis was embalmed and preserved in a sarcophagus of stone (p. 168). He was the symbol of the constantly operative fashioning power of the deity, and is on that account represented as the son of the moon, which, though never changing, appears to refashion itself every hour. The era of time named after Apis was a lunar period, containing 309 mean synodic months, which almost exactly corresponded with 25 Egyptian years.
$\mathbf{R a}$, the great god of Heliopolis (On) in Lower Egypt, as the king of gods and men, ranks next to Ptah, and is, from the exoteric point of view, the sun who illumines the world with the light of his eyes, and the awakener of life. He rises as a child, under the name of Harmachis (Har-em-khuti), at midday he is called $R a$, and at sunset he is represented as Tum, an old man subduing the enemies of Ra , who obstruct his entrance to the


Ptah. lower regions which he traverses at night. Daring his course through the nether world he becomes the ram-headed Khnum ( p . cli), or the nocturnal link between Tum and Harmachis, or evening and morning. As man in the region of the shades has to undergo many trials, so the ship of the sun, as soon as he has crossed the western horizon, no longer sails along the blue back of the goddess Nut, but along the sinuosities of the serpent Apep, the enemy of the setting sun, who is subdued and held in bondage by the companions of Ra.

In rising $R a$ is born, and in setting he dies; but his life is daily renewed by an act of self-procreation taking place daily in the bosom of nature, which was termed Isis, Muth, or Hathor. This goddess is frequently called the ruler of the nether regions, and is represented with the head of a cow, or in the form of a cow, which every morning gives birth to the young sun. Twelve human figures, each bearing the orb of the sun or a star on his head, represent the hours of the day and night. The animals specially sacred to Ra were the hawk ; the Upper Egyptian light-coloured Mnevis bull, which also belonged at a later period to Ammon Ra, and a specimen of which had even before that time been kept in the temple of the sun at Heliopolis; and, lastly, lions with light skins. The Phoenix, or bird from the land of palms, called by the Egyptians bennu, which,
according to the well-known myth, awakes to new life after being burned, and brings its ashes to Heliopolis once every five hundred years, was also associated with the worship


Harmachis, the great god.


Tum of Heliopolis, lord of the world. of Ra. As Apis is associated with Ptah, so this bird by the side of Ra is a symbol of the soul of Osiris. - Ra is generally represented with the head of a hawk, and coloured red. He holds in his hands the symbols of life and sovereignty, and wears on his head a disk with the Uræus serpent, or basilisk. According to the esoteric and pantheistic construction of the inscriptions on the tombs of the kings, Ra is the great Universe ( $\tau$ ò $\pi \tilde{\alpha} v$ ), and the gods themselves are merely so many impersonations of his various attributes (see Ammon Ra, p. clix).

Tum, or Atum, a manifestation of Ra, whose name is perhaps akin to temt, signifying the universe, was first worshipped in Lower Egypt, particularly at Heliopolis and at the city of Pa-tum, that is, 'the place of Tum', the Pithom of Scripture. His rites were also celebrated in Upper Egypt at an early period. He is one of the oldest of the gods, having existed 'on the waters' in the dark chaos of the embryonic world, prior to the first sunrise, or birth of Harmachis from the lotus flower. According to the later exoteric views he was the setting sun, the harbinger of the coolness of evening. Under his guidance mankind was created by Khnum, and he was the dispenser of the welcome northerly breezes. He was also the approved warrior against the dark powers of the infernal regions which obstruct the progress of the sun's bark, and is represented as a bearded man with a combined Upper and Lower Egyptian crown, or the orb of the sun, on his head, and the emblems of sovereignty and life in his hands. As the creator he sometimes has a scarabæus for a head; as Nefer-Tum he has the head of a lion, surmouuted by a hawk crowned with lotus flowers, and holds an ut'a eye in his hand. As representing the setting of the sun preparatory to its rising again, he
is also regarded as the god of the resurrection, as the hawk on his head indicates.

Khnum (Greek Chnubis, Knuphis, or Kneph), one of the most ancient of the gods, who, while retaining his own attributes, was often blended with Ammon, was chiefly worshipped in the region of the cataracts and in the oases of the Libyan desert. Being regarded as a link between the setting and the rising sun, he receives the sceptre of Ra beyond the western horizon (in which direction also lay the oases), and takes the place of that god during the progress of the sun through the nether world. Khnum ('khnem', the uniting) was also the power which united the days of sterility with those of fecundity, and was therefore specially revered in the island of Elephantine, near the first cataract, where the fertilising Nile first enters Egypt, as the god of the inundation and the dispenser of the gift of water. By his side usually stand the goddesses Anukeh and Sati. Khnum is one of the cosmic


Khnum. gods, who created the inhabitants of heaven. He and his assistants are associated with Ptah, and he is sometimes represented as moulding the egg of the world on a potter's wheel out of matter furnished by Ptah, and fashioning mankind. He is generally represented with the head of a ram, and coloured green. He occurs as often sitting as standing, wears the âtef crown on his head, and wields the sceptre and the symbol of life; while from his hips, proceeding from his girdle, depends a generative organ resembling a tail, which is appended to the most ancient form of his apron.

Ma, the goddess of truth and justice, is the radiant daughter of the god of the sun. She is easily recognised by the ostrich feather on her head, while in her hands she grasps the flower-sceptre and the symbol of life. In the more recent form of the ancient language she is termed T-mei (with the article),


Ma, daughter of Ra.
from which name an attempt has been made to derive that of the Greek goddess Themis, like whom Ma is represented as blind, or at least with bandaged eyes.

Gods of the Osiris and Isis Order. We owe to Plutaroh a detailed account of this myth, which has been uniformly corroborated by the monuments, and which may be briefly told as follows.

Isis and Osiris were


The mythological Trinity or Triad. Osiris. Horus. Isis. the children of Rhea and Chronos, that is, of Nut, the goddess of space, and of Seb, the god of the earth, which, owing to its eternal rejuvenescence and imperishableness, symbolises time. While still in the womb of their mother, that is, in the bosom of space, the children became united, and from their union sprang Horus. Typhon and Nephthys, children of the same parents, likewise married each other. Osiris and Isis reigned as a happy royal pair, bestowing on Egypt the blessings of wealth and prosperity. Typhon conspired against Osiris, and at a banquet persuaded him to enter a cunningly wrought chest, which he and his seventy-two accomplices then closed and threw into the Nile. The river carried the chest northwards, and so down to the sea by way of the estuary of Tanis; and the waves at length washed it ashore near the Phenician Byblos. Meanwhile Isis roamed in distress throughout the country, seeking her lost husband; and she at length succeeded in discovering his coffin, which she carried to a sequestered spot and concealed. She then set out to visit her son Horus, who was being educated at Buto. During her absence Typhon, while engaged in a boar-hunt, found the body of the god, cutitinto fourteen pieces, and scattered them in every direction. As soon as Isis learned what had happened, she collected the fragments, and wherever one had been found erected a monument on the spot to its memory; and this accounts for the numerous tombs of Osiris mentioned as existing in Egypt and elsewhere. Osiris, however, was not dead. He had continued his existence and his reign in the lower regions, and after his burial he visited his son Horus, whom he armed and trained for battle. The young god soon began a war against Typhon, and was at length victorious, although he did not succeed in totally destroying his enemy.

Osiris is the principle of light, while Typhon is that of darkness, which Osiris defeats and banishes to the infernal regions. Isis Hathor mourns over his disappearance, follows him towards the West, where she gives birth to Horus, who annihilates darkness and restores his father to his lost position. When $R a$ is termed the soul of Osiris, the meaning is that he renders visible the hidden principle of light (Osiris). When, on the other hand, Osiris is regarded as emblematical of the principle of moisture, the most perfect embodiment of which is the god Hapi, or the Nile, Typhon and his seventy-two companions represent the days of drought. Like the dead body of Osiris, the water flows towards the North, and the languishing Isis, that is, the


Osiris, prince of eternity. fruit-bearing earth, mourns over the loss of the fertilising power; but this is for a short period only, for Horus soon vanquishes Typhou in the southern districts, and the rising Nile again begins to impregnate the black soil with abundant fertility. Lastly, when Osiris is regarded as the principle of life, Isis, the earth, is the scene of the operation of that principle, while Typhon represents death, and Horus the resurrection. If we regard Osiris, as the monuments so frequently do, as a pure and perfect being, the principle of the good and the beautiful, in which case he receives the surname of Un-Nefer, we recognise in Typhon the discords with which life is so replete, but which seem to be permitted only in order that the purity of the harmonies into which they are resolved through the intervention of Horus may be the more thoroughly appreciated. Osiris, according to the exoteric doctrine, is also the sovereign of the lower regions and the judge of souls, which, if found pure, are permitted to unite with his. The dead, therefore, do not merely go to Osiris, but actually become Osiris. Osiris is always represented with a human head. He either sits as a king on his throne, or appears in the form of a mummy. He always wields the scourge and crook, and sometimes other emblems also. The crown of Upper Egypt which he wears on his head is usually garnished before and behind with the ostrich feathers of truth. Beside him, even in very ancient representations, stands a kind of thyrsus or entwined
rod, to which a panther-skin, the garb of his priests, is attached. In consequence of his function of promoting vegetable life, his wanderings, and perhaps also on account of this staff and skin, he was termed Dionysos (or Bacchus) by the Greeks.

Typhon-Seth. The name Typhon is most probably of Greek origin. The Egyptians named him Seth, or Sutekh, and represented him as a fabulous animal $H$, or with the head of this animal and subsequently as an ass, an animal which was sacred to him, or with an ass's head. His name is met with in the most remote period, but he appears originally to have been worshipped merely as a god of war and the tutelary deity of foreigners. He is usually styled the brother of Horus, and the two are called the Rehehui, or hostile twins, who wounded each other in the battle above described. At a later period, after the god of battles and of foreigners had shown himself permanently unfavourable to the Egyptians, they ceased to render service to him, and erased his name from the monuments on which it occurred, and even from the cartouches of the most highly extolled kings. With regard to his connection with the myth of Osiris and Isis, see p. clii.

Nephthys, the wife of Seth, was called by the Greeks Aphrodite or Nike (Victory), probably on account of her being the wife of


Neb-hat (Nephthys). the god of war. Her proper sphere was the nether world. In the upper world she occurs as the nurse or instructress of the youthful Horus, and she appears with Isis, mourning and beating her forehead, at the funeral rites of Osiris, whom she had loved, and to whom, being mistaken by him in the dark for Isis, she had borne Anubis. She is also associated with Osiris and Isis, with the youthful Horus and Isis, and even, as one of a tetrad, with Osiris, Isis, and Horus. She is usually represented with the symbol $\prod_{0}$ (i.e. neb-hat, mistress of the house) on her head, which is adorned with the vulture cap, and grasping in her hands the flowersceptre and the symbol of life.

Anubis was the guide of the dead to the infernal regions and the guardian of Hades, of which he is termed the master. In the form of a jackal, or with the head of a jackal, he presides over funeral rites and guards the kingdom of the West.

Horus, who occurs in many different forms, invariably represents the upper world or region of light, and also regeneration, resurrection, and the ultimate triumph of good over evil, of life over death, of light over darkness, and of truth over falsehood. He is
constantly called the 'avenger of his father'; and detailed illustrations of his contest with Typhon, dating chiefly from the period

of the Ptolemies, have been handed down to us. In the form of a winged disk of the sun he opposed Typhon and his companions, being aided by the Uræus serpents entwined on the disk. As the god of light (Harmachis, i.e. Horus on the ho-
 rizon) he merges into Ra , as he personifies the resurrection of the young light from darkness. The 'young Horus' springs in the form of a naked child with the lock of infancy from the lotus-flower. Under the name of Hor-hut (Horus, the wing-expander) he overthrows Seth and his associates in behalf of Ra Harmachis, who, as a god of light, is considered equal to Osiris. Ra is equivalent to the Helios of the Greeks, and the young Horus and Hor-hut to Apollo. The hawk, with whose head he is represented, is the animal sacred to him 8 and the bird itself with a scourge on its back sometimes stands for him.

Thoth (Egyptian Tahuti, Greek Hermes) is primarily revered as the god of the moon, and in this capacity often takes the place of Khunsu (p. clx). As the phases of the moon formed the
basis of the earliest reckoning of time, Thot was regarded as the dispenser of time and the god of measures, numbers, and indeed of everything subject to fixed laws. Lastly he was also regarded as the mediator by whose aid human intelligence manifests itself, as the god of writing, of the sciences, of libraries, and of all the arts which tend to refine life. In the infernal regions he records the result of the weighing of hearts, keeps a register of the trials of the dead, and exhorts their souls to return to the radiant spirit of the universe. He is represented as an ibis on a standard
 the head of an ibis, and frequently crowned with the disk of the moon and the ostrich-feather of truth. In his hands are a reed aud a


Safekh. A goddess who is associated with Thoth, but whose precise name is unknown, is always designated as Safekhu, i.e. one who has laid down her horns, as she bears these appendages reversed over her forehead. She is the tutelary deity of libraries, of sacred writings and lists, and therefore of history also. She holds in her left hand a palm-branch with inuumerable notches marking the flight of time, and with her right she inscribes on the leaves of the persea tree all names worthy of being perpetuated.

Isis. Muth. Hathor. These three goddesses, although externally regarded as separate, were really different modifications of the same fundamental idea. As a counterpart of the male generative principle, they all represent the female element, the conceiving and gestative principle, or the receptacle in which the regeneration of the self-creating god takes place. Muth, whose name signifles mother, is represented as a vulture, or with a vulture's head. She is the great birth-giver, who protects Osiris and Pharaoh with her outspread wings, and she guards the cradle of the Nile, whose mysterions source is defended by a serpent. The functions of Isis (p. clii), who endows everything that is capable of life on earth with the good and the beautiful, have already been mentioned. She wears on her head the vulture cap, cow's horns, and the disk of the moon, or the throne $\int \sqrt{d}$, or all four combined. As Isis Selk, she is represented with a scorpion hovering over her head, as Isis Neith, who is also equivalent to Muth, usually with a weaver's shuttle $\mathcal{4} \boldsymbol{\sim}$, while as Isis Sothis, or the dog-star, she sails in a boat. She is also represented as suckling the infant Horus in her lap. Her sacred animal is the cow, which belongs also to 1 sis Hathor. The name Hathor signifies 'house of Horus', for within


Mruth.


Isis and Horus.
|*IL|


Isis Sothis.
the bosom of this goddess the young god gave himself new life. She is the goddess of love, the great mother, who accords her divine protection to all earthly mothers, the dispenser of all the
blessings of life, the beautiful goddess who fills heaven and earth with her beneficence, and whose names are innumerable. At a later period she was regarded as the muse of the dance, the song, the jest, and even of the wine-cup. The cord and tambourine in her hand denote the fettering power of love and the joys of the festivals

over which she presided. Her sacred animal was the cow, and she generally appears in the form of a youthful woman with a cow's head, bearing the disk between her horns; and she is even spoken of as the mother of the sun (p.cxlix). Hathor also plays an important part as mistress of the nether world, where she is usually called Mer-Sekhet.

Sekhet. Bast (or Pasht). These goddesses likewise coincide more or less with the many-named Hathor; but the lion or catheaded deity known by these and many other names possesses several characteristics entirely peculiar to herself. She is called the daughter of Ra and the bride of Ptah , and personifies sexual passion. Represented as a Uræus basilisk of the crown of Ra, she is a symbol of the scorching heat of the orb of day; in the nether regions she fights against the serpent Apep, and in the form of a lion-headed woman or a cat, brandishing a knife, she chastises the guilty. But she also possesses kindly characteristics. 'As Sekhet', we are informed by an inscription at Philæ, 'she is terrible, and as Bast she is kind.' The cat, her sacred animal, was long an object of veneration. She wears on her head the disk with the Uræus serpent, and holds in her hands the sceptre and the symbol of life.

Sebek, a god who also appears in union with Ra as Sebek

Ra, is represented with the head of a crocodile, and was chiefly revered in the region of the cataracts at Silsili, Kôm-Ombu, and in the Fayûm. At Kôm-Ombu Sebek forms a triad in conjunction with Hathor and Khunsu. His crocodile head is crowned with the disk, the Uraus basilisks, and the double feather. He grasps the sceptre and the symbol of life in his hands, and is coloured green. His sacred animal, the crocodile, was kept in his honour, but a certain Typhonic character was attributed to the reptile, as the sacred lists omit those nomes where it was worshipped.


Sekhet Bast.


Sebek.


Khem Amun.

Ammon-Ra. Ra (p. cxlix), with whose worship the rites of many other divinities were combined, and whose attributes were frequently merged in those of Osiris, reigned, according to the later inscriptions, as the great monarch of the gods, but Ammon, who was revealed to the exoterics as a son of Ptah, obtained possession of the throne of this world, while Ra continued his sovereignty in Amenthes, or the nether regions. Ammon, whose name siguifles 'the hidden one', is a deity of comparatively late origin, having been at first merely the local god of Thebes; but after the valley of the Nile had been delivered from the Hyksos under his auspices, and after Upper Egypt and Thebes had gained the supremacy over Lower Egypt and Memphis, he was raised to the rank of king of all the gods. The attributes of almost the entire Pantheon of Egypt were soon absorbed by this highly revered deity. He reposes as a hidden power in Nun, or the primordial waters, and during
the process of his self-procreation he is termed Khem. As soon as he has manifested himself, he, as 'the living Osiris', animates and spiritualises all creation, which through him enters upon a higher stage of existence. On the human beings fashioned by Tum he operates mysteriously, disposing them to a love of discipline and order, and to an abhorrence of all that is irregular, evil, and unsightly. Justice, which punishes and rewards, is subject to him, and even the gods 'prostrate themselves before him', acknowledging the majesty of the great Inscrutable. Every other god now came to be regarded as little else than a personification of some attribute of the mysterious Ammon, god of the gods, standing in the same relation to him as models of parts of a figure to the perfect whole. The monu-


Ammon-Ra, King of the gods.
ments at Thebes represent him enthroned or standing, coloured blue or black, generally adorned with the long feather headdress termed shuti, sometimes with the crown of Upper Egypt alone (8, or with that of Upper and Lower Egypt, and sometimes with a helmet or diadem on his head. In his hands he wields all kinds of royal insignia, such as the sceptre, the scourge, the crook, and the symbol of life. When represented with a ram's head he is termed Ammon-Khnum, Knuphis, or Kneph (p. cli). Beside him in the great triad of Thebes stand Muth, the maternal principle (p. clvii), and Khunsu or Khons, who represents the operation of divine intelligence in the external world, and particularly in its
relation to human affairs. He is the 'destroyer of enemies', he aids mankind in the battle of life, and he heals the sick. To his head the moon is attached by the infantine lock. From his wanderings as the god of the moon, and from the vigour with which he destroyed evil spirits, he was identified with Heracles by the Greeks.

Doctrine of Immortality. From the account of the worship of Isis and Osiris it is obvious that the Egyptians believed in the immortality of the soul (whence arose the prevalent worship of ancestors), in a moral responsibility, and in a future state of rewards and punishments. The doctrine with regard to the life of the soul after death was not, however, at all times and in all places the same. According to the Egyptian belief, every human being consisted of three distinct parts, which during the period of life were closely united: (1) the body, a portion of matter; (2) the 'sahu', or soul, which belonged to the nether world and ultimately returned thither; and (3) the ' $k h u$ ', an emanation of the divine intelligence. Each of these elements could be separated from the others, but whatever changes it underwent, it was immutable in quantity and quality. As the god of the sun is always the same and yet hourly different, being at first Horus, then Ra, next Tum, and finally Khnum, so it was with the soul and the intelligence which fills and illuminates it, and which, as soon as the gates of the tomb are opened for its reception, speaks and acts for it. Once within the gates of Amenthes, the soul had to undergo many trials. Ferocious beasts had to be conquered, demons to be subdued, and castles to be stormed, and all this was to be done with the aid of texts and hymns written on papyrus and scarabæi, $u t^{\prime} a$ eyes, and other amulets swathed in the bandage of the mummy. At length the soul reached the hall of double justice, where the heart in its vase was placed in one scale and the goddess of truth in the other. Horus and a dog-headed ape conducted the process of weighing, Anubis superintended, Thoth recorded the result, and Osiris with forty-two counsellors pronounced sentence. If the heart was found too light, the soul was condemned to suffer the torments of hell, or to continue its existence in the bodies of animals, within a certain period after which it returned to its original body to begin life anew, and had afterwards to undergo another trial by the judges of Hades. If the heart was found sufficiently heavy, Osiris restored it to the soul; the 'sahn' might then return to its mammy; its intelligence, after a period of purification in the regions of the blessed, might unite with the divinity from which it had emanated, and, merged in Horus, Osiris, etc., might traverse the heavens in the boat of the sun, or walk anew among the living in any form it pleased. Finally both the 'sahu' and the intelligence were reunited to the dead body they had quitted, which its mummification had preserved from decay, and which awaited the return of the soul from Amenthes or from its sojourn in the bodies of animals.

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## VIII. Historical Notice of Ancient Egyptian Art.

In the ancient Egyptian poem which extols the achievements of Ramses the temples in the valley of the Nile are called 'everlasting stones'; and the works of Egyptian art do indeed seem to lay claim to perpetuity. Some of the monuments have existed for forty or even fifty centuries, so that, compared with them, the works of all other nations appear recent and modern; and a still greater marvel is that the skill displayed in the execution of these monuments must have been the grow th of many antecedent ages, all memorials of which are now buried in the obscurity of the remotest antiquity.

The Egyptian people belonged to the so-called Hamitic race, and, like the Semites and, the Indo-Germanians, had their original home in Asia (comp. pp. xxxvii, xxxviii). Whether they brought any of their arts to the Valley of the Nile, or whether their taste for art and their imagination were awakened for the first time by the Father of Rivers, must of course remain for ever unknown. Some of the very earliest of the products of Egyptian art are indeed more akin to those of Asia than the later, but Egyptian art as a whole presents so peculiar and unique a character that its origin was most probably local. The question might indeed be settled if we were in a position to compare early Egyptian art with that of the Oriental nations of the same period; but of the latter we can now find no trace. The ouly sources from which we can form any opinion regarding the original condition and the earliest development of Egyptian art are the technical execution of the oldest known monuments and the forms and style of decoration employed in them. Thus the ceiling-painting in the pyramidal tombs reveals its indebteduess to the textile handicraft; for it is in the art of weaving alone that the margins and seams there represented have any use or significance. Again, the walls of the most ancient tombchambers contain horizontal and vertical bands and convex mouldings, the design of which has obviously been borro wed from a system of building in wood. The sloping ridges of the pyramids point to an original style of building with crude brick, as walls of that material required to be tapering in form to ensure their durability. We thus gather that the Egyptians of a very remote period were weavers and potters, familiar with the arts of building in wood and in brick. If we go a little farther, and venture to draw inferences from the subjects and forms of their earliest works of art, we find that the Egyptians of the remotest traceable period must have been a cheerful and contented people, free from that taste for the mystic and the symbolical which afterwards characterised all their exertions in the sphere of art, and endowed with a love of life and nature which they zealously manifested in the earliest products of their imagination.

An attempt to gather a history of Egyptian art from the information we possess regarding the various dynasties of the Egyptian monarchs has led to the following results, which, however, may be much simplifled or modified by future discoveries. The first period of the steady development of Egyptian art closes with the sixth dynasty, and the monuments of Memphis are the most important, though not the only structures of the early dynasties. Some of these (such as the pyramid of Cochome, p. 164) are supposed to date as far back as the time of the fourth king; and there is reason to believe that they were originally built of sun-dried bricks encrusted with stone, instead of, as subsequently, in solid stone. This would also account for the mode of construction observed in the stone pyramids,


In. Pyramid of Cheops (usual form of pyramids). Ib. Pyramid of Dahshûr, with bent sides. Ic. Step-pyramid of Sakkâra.
which consist of repeated incrustations of tapering courses of masonry. According to the well-known hypothesis of Dr. Lepsius, the famous German Egyptologist, these different layers or crusts, like the concentric rings in the trunk of a tree, perhaps corresponded to the number of years during which the deceased monarch reigned. Besides the pyramids of the usual regular form (Fig. I, a), there are others with sides forming an obtuse angle, and others again with sides in steps. Of the pyramid with bent sides there is an example at Dahshûr (Fig. I, b), and of the pyramid in steps one at Sakkâra (Fig. I, c). The terrace, or step, form seems, however, to have been uniformly used in all the pyramids up to the apex (which was probably tapered), and in most of them the angles formed by the steps were afterwards filled up with stone. There can now be no reasonable doubt that the pyramids were intended to form the inaccessible tombs of great monarchs, near which their courtiers and magnates erected mortuary
chapels for themselves (Mastaba) in the form of blunted pyramids, in order, as it were, to pay homage to the memory of their illustrious masters. The pictorial decorations of these temples, as well as the plastic works of the same period, serve most impressively to complete the artistic effect of the pyramids. While their marvellously perfect execution alone indicates a high state of artistic development, our admiration is specially aroused by the striking fidelity to nature and expressiveness of the sculptures. The unfavourable criticisms on Egyptian sculpture formerly current may indeed now be regarded as entirely refuted. Even in European museums an opportunity is afforded to the traveller of becoming acquainted with the noble style by which the early Egyptian art alone is characterised. What visitor to the Louvre, for example, can fail to remember the striking impression produced by the statue of the 'Writer?' The expressive eyes are formed of dark quartz containing a transparent pupil of rock crystal fixed with a small knob of metal, while the attitude is remarkable for its lifelike fidelity and strong individuality. This statue dates from the fifth or sixth dynasty, and the museum at Gizeh contains other plastic works of the same period in which an almost overdrawn realism is still more apparent. The limestone statue of RaNefer, a priest of Ptah-Sokar at Memphis, and the wooden figure of the 'village shêkh' (p. 96), which the Paris Exhibition of 1867 brought into popular notice, are the best-known specimens of a style of art of which the very existence was unsuspected a few decades ago, and the discovery of which has tended greatly to modify the old supposition that the Egyptian sculptors executed their works in mere mechanical accordance with a prescribed canon. The chief merit of the earliest Egyptian sculpture is the faithfulness of the portraiture, which is such that the identity of the person represented by two different statues may often be determined by the similarity of the features, even when executed at different periods of the person's life. In this way have been identified eight statues of Khafra, the third king of the fourth dynasty, although all differing in measurement, material, and the age represented (comp. pp. 97, 98). Observation of nature in the case of these earliest works has evidently been carried into the minutest details. The race of men represented is uniformly of the same character, somewhat resembling that of the modern fellâhîn; the figures are of a powerful, thickset type, and their muscles are faithfully represented, occasionally to exaggeration. These early sculptors, however, were incapable of producing works of a more complex character, where excellence of general effect required to be superadded to accuracy of detail, and in this respect they were far surpassed by their successors. Even the reliefs in the tomb-chambers of Memphis are executed in a singularly fresh and unsophisticated style, and the spectator will hardly regret the absence of the mystic symbolism of the later period.

After the sixth dynasty there occurs a sudden falling away from
this vigorous style of art, occasioned perhaps by political dissensions, by internal wars, and possibly by a change of religious convictions. It was not until the rise of the Eleventh Dyinasty that the state of the country became more settled, and that art began torevive. The new style, however, differed materially from the old. As the ancient capitals of Memphis and This now began to yield precedence to Thebes, the new centre of the kingdom, and as the system of writing, the laws, and the constitution, had all undergone material alteration, so, too, it may rather be said that the cultivation of art began anew than that the style then practised was a development of that of the fourth and sixth dynasties. Of this second efflorescence of art no great monuments have been handed down to us, the most important works being the obelisks of Heliopolis and the Fayûm and several colossi dug up at Tanis and Abydos. The rock-tombs of Beni Hasan are also interesting relics of the period of the Twelfth Dynasty. In these we find a reversion to the rock-building style, which, according to Lepsius, is nearly identical with that of the grotto architecture, and owed its origin to the prevalence of ancestorworship, and to the popular desire, arising from the Egyptian doctrine of immortality, for the preservation of the bodies of the dead. The rock-tomb was safe from the overflow of the Nile, while its equable temperature arrested the decay of the corpse, and a chapel connected with it afforded the relations an opportunity of paying homage and presenting offerings to the deceased. The division of the tomb into a series of chambers, leading at length to the actual sepulchre, soon led to their being architecturally decorated. Where there were several chambers, one behind the other, it was natural that openings should be made in the walls for the sake of admitting light. The next step was to convert the remaining portions of wall into pillars for the support of the roof, and to plane off their corners, part of the pillar being, however, left square at the top so as to blend the octagonal column with the roof. In the next place the octagonal pillar was sometimes converted into one of sixteen sides, so as to resemble a column, and in some cases the flat surfaces were grooved or fluted, a sharp angle being thus formed between each of them. Polygonal columns of this character, which occur in the first tomb of Beni Hasan, have been called Proto-Doric or Egypto-Doric by Champollion and Falkener, from their resemblance to the Doric columus of the Greeks (Fig. II). The points of resemblance are the marked fluting, the tapering, and the absence of bases; but the Proto-Doric differs from the Greek Doric in being destitute of the 'echinus', a member resembling an overhanging wreath of leaves, and forming the capital of the Doric column. The chief difference, however, is that some of the sides of the ProtoDoric columns are not fluted, but left smooth for the reception of coloured inscriptions. The column thus loses its structural significance, being degraded to a mere surface for inscriptions, and
presents a marked contrast to the Doric, where each member and each line fulfils a definite requirement of the building.

The architects of the tombs of Beni Hasan, however, were not unacquainted with a light and elegant mode of building above ground, which cannot have originated in the grotto architecture.

II. Section of the N. Tomb and Columns of Beni Hasan.

This is proved by their use of the lotus-column (Fig. III), the prototype of which is a group of four lotus-stalks bound together and secured at the top by rings or ligatures, the capital being formed by the blossoms. These columns, which contrast strongly with the massive Proto-Doric, suggest a light style of garden architecture in wood.

While the architecture of the eleventh and twelfth dynasties bears some slight resemblance to the earlier style, the sculpture of the same period presents an almost total deviation from the ancient traditions. The primitive, lifelike realism to which we have already alluded is displaced by the rigorous sway of the Canon, by which all proportions are determined by fixed rules, and all forms are necessarily stereotyped. There seems, however, to have been no
retrogression in point of technical skill; for, as in the time of Khafra, the hardest materials still became compliant, and the difficulties of the minutest detail were still successfully overcome by the sculptors of the Pharaohs.

Another considerable break now took place in the progress of Egyptian art. This dreary interval began with the invasion of
 the Hyksos or Shepherds, and lasted throughout the whole of their domination. To them is attributed the destruction of the older monuments, and they themselves have left no architectural remains behind them. They were not, however, entirely insensible to the charms of art, and after the first terrors of the invasion were over, they did not prevent the Egyptian artists from prosecuting their calling. As the Normans in Sicily adopted the culture of the conquered Arabs, so the Hyksos turned to account the knowledge of art and the technical skill possessed by the Egyptians (p. ovii). The sculptures excavated at Tanis, the capital of the Hyksos (four sphinxes and particularly a group of river-gods in granite), are of Egyptian workmanship, and there is nothing to betray their origin in the Hyksos period except the type of the features, the bushy beards, and the thick tufts of hair (pp. 102-104).

With the expulsion of the Hyksos begins a new period, in the history of art as well as in that of politics. The warlike and victorious monarchs of the Eighteenth and Nineteenth Dynasties, in particular, have perpetuated their memory by astonishingly numerous monuments. The compulsory labour of captive enemies afforded the architects an opportunity of carrying out their most gigantic designs, while the achievements of their sovereigns, such as the campaigns of Thothmes, Amenophis, and Ramses, supplied the sculptors with an inexhaustible theme for the decoration of the façades of their temples. To this period of the new empire belong most of the Theban monuments. The taste for the great and the colossal, and for symmetry of proportion had attained its culminating point, but the stagnation of the lifesprings of art, the dependence of the drawing and colouring on formal rules, and the over-loading of the ornamentation with symbolical signs (such as the Uraus and the Hathor masks) become unpleasingly apparent. It can hardly, however, be said that the decline of Egyptian art had yet begun; for this period lasted so long as to give rise to a general belief that the Egyptians had never possessed any other style, and entirely to obliterate the recollection of the more aucient and materially different period of development. At
the same time a careful inspection of the monuments of this period will convince the observer that no farther development could be expected afterwards to take place on the basis of a system so lifeless and entirely mechanical. Shortly before the conquest of the country by the Persians, however, a slight improvement in artistic taste appears to have taken place. While the monuments of the Twentysecond and following Dynasties are unattractive, being mere reproductions of earlier works, the sculptures of the Twenty-sixth Dynasty (such as the alabaster statue of Queen Ameniritis of the XXV. Dynasty) exhibit a considerable degree of elegance and refinement. But this revival was of brief duration. After the establishment of the Ptolemæan dynasty the native art became entirely extinct, and the innate charms of Hellenic art, which even remote India was unable to resist, began to affect the hitherto strongly conservative and self-satisfied Egyptians (comp. pp. clxxx et seq.).

Having thus given a slight chronological outline of the progress of Egyptian art, we must now endeavour to supplement it by a description of the chief characteristics of each period. Our attention will be chiefly directed to the monuments of the new empire, owing to their great number and extent.

The Column in Egypt, as elsewhere, constitutes the most important of all architectural members. Its absence indicates a very elementary stage of the art of building, when artistic development has yet to begin. The column imparts to the edifice an appearance of organic life, it lightens and breaks the outline of its different masses, and affords strength and support. When compared with the Greek columnar orders, the Egyptian column is of a very imperfect character. Its decoration and its form do not immediately and exclusively express its proper office, as is the case with the Greek column, and the Doric in particular. Its dependence on its natural prototype, the wreath-crowned canopy-support, still continues apparent, and its proportions, though not altogether independent of rule, still appear too arbitrary. Lastly, the height and thickness of the columns do not stand in an appropriate ratio to the weight they have to bear. It must, nevertheless, be admitted that the eye is delighted with the brilliance of their colouring and the perfection of their execution.

Egypt possesses a considerable number of different orders of columns. Some of these occur in the Old Empire only, while others are found for the first time in monuments of the New Empire, without, however, belonging to a higher grade of art. In the tombs of Beni-Hasan (XII. Dynasty) we have become acquainted with the polygonal or Proto-Doric column, and also with that with the budcapital. The latter was perhaps suggested by a form of pillar which occurs in the tombs of the VI. Dynasty near Antinoé (the modern El-Bersheh). The surfaces of the pillars are hollowed out, and in the hollows rise lotus stalks, crowned with a bunch of buds or
closed blossoms (Fig. IV). Akin to the lotus columns of Beni Hasan is an order of column of the new empire, which was adorned partly with sculpture and partly with painting, and which afterwards gradually adopted the conventional form. This column tapers at its base, where it is encircled with a slight wreath of reed leaves. It also tapers again upwards, and in some cases presents a shaft painted with horizontal bands and hieroglyphics, and in others a shaft grooved so as to imitate the stalks of a plant (the

IV.

V. Papyras Columns.
papyrus) which are bound together at the top with a ligature. The capitals, somewhat simple in form, and tapering upwards, are sometimes decorated on the lower part with a wreath of upright reed leaves, and sometimes, like the shafts, are treated as surfaces for painting, in which case their origin in the vegetable kingdom is indicated by a few painted buds only (Fig. V. a, b).

While the columns hitherto described performed the structural function in temples and tombs of supporting massive stone roofs, the order of columns with Calyx Capitals was chiefly used for the decorative purpose of enclosing the processional approach in the anterior halls of the temples, and was required to support but little weight. The shafts of these columns rest on round bases resembling disks, they taper downwards, and are treated as surfaces for
painting. The flowers and leaves on the capitals sometimes seem to be attached superficially only (Fig. VI, $a$ ), while in other cases the leaves appear to form a wreath, growing out of a columnar stem, and leaning slightly outwards so as to assume the calyx form. Of this style the papyrus (Fig. VI, b) and the palm (Fig. VI, $c$ ) formed the natural prototypes, and even at a late period several

VI. Calyx Capitals.
other very pleasing types were added. Another kind of column, which seems to have been much in vogue during the latest period of independent Egyptian art, is of inferior importance and artistic merit. It has a shaft terminating at the top in masks attached to four sides, usually representing the goddess Bathor with the cow's ears, and above these are placed miniature temple façades, forming a kind of abacus. Both in this case and in that of the Osiris pillars (Fig. VII), where the figure of the god, with the crook in his left hand and the scourge in his right, stands quite detached from the pillar, and bears no part of the weight, the structural function has been treated as a matter of very subordinate importance.

Immediately connected with the columns is the Entablature above them. The inner apartments of the temples were ceiled with stone beams exclusively, extending from the abacus (or crowning slab) of one column to that of another; and the rectangular spaces thus formed were filled with slabs of stone, adorned sometimes with astronomical designs. The chief characteristics of the outer parts of the entablature are, that the architrave rests immediately on the abacus, and that there is a furrow hollowed out above it, forming a deep shadow. The architrave is generally inscribed with hieroglyphics, so that its

VII. Osiris pillar.
structural office is rendered less apparent; but the concave moulding above it presents the appearance of a proper crowning cornice (Fig. VIII, $b$ ), thus serving to counterbalance the effect of the inwardly sloping walls, and giving the building an appropriate finish. The hollowed cornice is usually embellished with upright leaves or staves; and, when it crowns a portal, a winged sun-disc generally hovers over the centre. The architectural idea embodied in the entablature of the tombs of Beni Hasan is materially different. Above the architrave lies a straight projecting slab,


VIIIb. Entablature the Tombs of Beni Hé.
with hollowed cornice.
which presents the appearance of being borne by a series of beams (Fig. VIII, a). The resemblance here to cognate Oriental modes of building is very apparent, while the entablature above described is peculiar to Egyptian art. The crowning of the walls with the scotia, and its frame-like embellishment of roll-moulding, constitute the chief articulation of the edifice; but this would have afforded insufficient relief had it not been supplemented with colouring, whereby the cold surface of the walls was covered with a pattern resembling that of a gorgeous carpet.

In order that the traveller may thoroughly understand and appreciate Egyptian architecture, he should make himself acquainted, not merely with the different modes of building and their details, but with the peculiarities of the national religious rites. The costly stone edifices of the ancient Egyptians were used exclusively for religious purposes. It is an error to suppose that the temples contained the royal residences within their precincts; the nature of the climate alone would have rendered them uninhabitable. The kings' palaces, as we learn from the representations of them in tombs, were edifices of a very light and airy description, adorned with balconies, colonnades, and bowers, and surrounded by gardens and ponds. They were built of brick and wood, and, as the sole object of the architects was to provide a convenient and pleasant dwelling, they were richly decorated with colouring.

With regard to the architecture of the temples, it is import ant
to keep in view the fact, that they were neither destined for the reception of a congregation like Christian churches, nor, like the Greek temiples, erected as mere receptacles for the image of the god. The Egyptian worshippers approached the temple precincts in solemn procession, and the profane remained outside, while the initiated and the ordained penetrated to different parts of the interior in accordance with the degree of their knowledge of the divine mysteries, the high priest alone being privileged to enter the innermost sanctuary.

The multitude would first arrive in their festively decorated boats by the great highway of the Nile, and they would then traverse the avenue leading to the temple, which was flanked by sphinxes on each side. The sphinxes consist of a lion's body with the head of a man (Androsphinx), or that of a ram (Kriosphinx), and according to an inscription at Edfu they were intended to symbolise the conflict of Horus with Typhon-Seth. The sphinx avenue led to the precincts of the temple proper, the Temenos of the Greeks, which were completely enclosed by a wall, built of bricks of the Nile clay, or, as at Edfu, of solid stone. The sacred lakes, generally two in number, and the sacred grove were usually the only accessories of the temple which lay without the precincts. At the end of the avenue the eye is confronted by two huge towers with the entrance between them, called the Pylons, which are in the form of truncated pyramids, with walls divided into sections by round staves, and affording admirable surfaces for plastic or pictorial decoration. The pylons and the portal between them are both crowned with the usual scotia. Under ordinary circumstances these pylons present a very imposing appearance, but their grandeur must have been much enhanced when they were festively decorated (as in Fig. IX) on solemn occasions, and when gaily hung with flags to welcome the arrival of the worshippers. Within the pylons, in the larger temples, lay a large open court (Peristyle), flanked on two or three sides with colonnades, and beyond it a large hall borne by columns (Hypostyle), of which those in the centre, differing in size and form of capital, marked out the route to be followed by the procession. In many of the temples a smaller columnar hall, and chambers of smaller size and decreasing height, all lying in the line of the processional route (and together called the Prosecus), separated the hypostyle from the small, dark, and secluded sanctuary, called the Adytum or Secus, sometimes consisting of a single huge hollowed block of stone, where behind rich curtains lay the symbol of a god and a sacred animal. The sanctuary was surrounded by a number of chambers of various sizes, and staircases led to the roof and to other apartments which either served as dwellings for the custodians and receptacles for the temple furniture, or for the celebration of sacred rites.

Having thus glanced at the internal arrangements of the temple,
we may now retrace our steps and rejoin the devout procession. The lower classes of the people (the 'Pasu'), forming the great bulk of the procession, were not permitted to advance beyond the sacred grove and the courtyard, where on certain days they offered saoriflces. The 'Patu', or lowest grade of the instructed, the 'Rekhiu', or esoterics, who were initiated into the sacred mysteries, and the 'Ammiu', or enlightened, advanced into the great hall, and from the portal of the Prosecus, or hall 'of the manifestation of majesty', they were permitted to behcld from afar the sacred emblem of divinity. These worshippers were now passed by the king and the officiating priests, who ascended in solemn procession to the roof, while the high priest entered the small and sombre chamber of the

IX. Decorated Portal and Pylons.
god. The annexed ground-plan of the $S$. temple at Karnak will render the foregoing description more intelligible (Fig. X), and analogous arrangements might easily be pointed out in the temples of other nations, such as those of Semitic race. The erection of obelisks or colossi (or both) in front of the pylons is also susceptible of easy explanation. The obelisks, the form of which was well adapted to break the monotonous outline of the walls, record in hieroglyphic inscriptions the victorious power bestowed on the

Pharaohs by the god, while the royal statues remind beholders of the duty of monarchs to show their gratitude by erecting temples to the gods. The winged disk of the sun with the heads of the Uræus serpent (p. clv) over every entrance has also a noteworthy signifioation. It symbolises the victory of Horus over Typhon, and the triumph of good over evil; and an inscription at Edfu informs us that, after the victory of Horus, Thoth (reason) commanded this symbol to be placed over all entrances. On the other hand the way in which architecture is constantly made subservient to painting, for the purpose of obtaining surfaces for symbols and inscriptions, is unpleasing. Every column, every pillar, every roof-beam, and every wall is embellished with raised or engraved

X. Ground Plan of the S. Temple at Karnak.
figures and charaoters, all of which are painted. The scenes which portray the victories of the Pharaohs, and their intercourse with the gods, are always accompanied by explanatory inscriptions, and even the simplest ornaments used under the New Empire have some symbolical signification.

The form of temple above described sometimes required to be varied in consequence of the nature of the site. In Lower Nubia the sandstone rocks approach so near the Nile that the temples had to be partially or wholly excavated in their sides. At Girgeh, for example (Fig. XI), the pylons and the colonnaded courtyard were built in the open air in front of the temple, while the hypostyle and the sanctuary were excavated in the rock. The larger temple of Abu Simbel, on the other hand, including the pylons and the colossi, is entirely excavated in the rock. During the Ptolemæan era other deviations from the traditional types came into vogue. Differences in the forms of the capitals, in the ornamentation, and other details, as well as a more arbitrary disposition of the temple arrangements themselves, now clearly betray the invasion of Greek influences.

Several of these late buildings, entirely enclosed by columns, with intervening walls rising to half the height of the columns, or even higher, so strongly resemble the Greek peripteral temples externally, that some internal similarity is involuntarily expected. The probable object of some of these edifices, namely to serve as
enclos ures for sacred animals, proves them to be of purely Egyptian origin; but, owing to the abnormal disposition of the different members, it is difficult to conceive them to be products of purely native art. Besides the temples in the island of Philæ, the im-

XI. Groand Plan of the Grotto of Girgeh.
posing edifices of Edfu (Apollinopolis Magna), Kôm(Ombu (Ombos), Esneh (Latopolis), Tentyris (Dendera), and Erment (Hermonthis), afford ample opportunities for the study of the Ptolemæan style of architecture, the impression produced by which is apt to procure for Egyptian art a less favourable general verdict than it strictly deserves.

While the edifices dedicated to the service of the gods belong exclusively to the period of the new empire, there still exist Mortnary Temples the origin of which may be traced back to the remotest periods of the ancient empire. The oldest of these temples are called Mastabas (comp. p. 173), and contained a chapel for the celebration of sepulchral rites, as well as a tomb. The kings, however, were not satisfied with a monument in which their tombs and mortuary chapels were united, but adjacent to their pyramids erected temples in which sacrifices were to be offered for the welfare of their souls. The handsome pillar-structure of granite and alabaster near the great Sphinx appears to have been a temple of this kind in connection with the pyramid of Chefren. Under the New Empire also the kings constructed their actual burial-places at a distance from the monuments dedicated to their memory. The deep rock vaults in the ravines of the royal tombs were the restingplaces of their remains, while the great 'Memnonia' (which are placed exclusively on the W. bank of the Nile at Thebes) were the temples where rites were celebrated in their memory. The mostinteresting feature of the mortuary temples is their pictorial decoration. The subjects of those in the memnonia are of course the power and prosperity, the victories and achievements, of the monarchs, while the private chapels contained scenes from the domestic life of the
deceased. The memnonia sometimes covered a very extensive area, like that of Ramses II., which contained a library and a school. Most of them have pylons and large colonnaded halls, but it cannot now be ascertained whether they were uniform in their arrangements.

By far the greater number of Egyptian sculptures are in immediate connection with architectural works. Colossal statues mount guard over pylons and pillars, and every available surface is adorned with reliefs. If these plastic works are to be fairly judged, they must be regarded as component parts of the building they adorned. Speaking of the colossal statues, Dr. Lepsius justly remarks:- 'The features of these statues, which even received divine honours, and were enthroned in, or in front of, temples in a commanding position, either as structural supports, or detached from the pillars behind them, wear the same character of monumental repose as the statues of the gods themselves, and yet without the possibility of their human individuality being confounded with the universally typical features of the divine images'. - This is eminently the case with the colossal sitting statues, whose position (with their legs bent at a right angle, their arms firmly pressed against their sides, and their heads looking in a perfectly straight direction) may well be called stiff, but not properly conventional. Many peculiarities of Egyptian art, especially during the earlier period, are apt to be attributed to the imperative requirements of sacerdotal authority, but they are perhaps rather to be accounted for by the imperfection of artistic development. The sculptors exhibit great skill in detail, but they seem incapable of making their skill subserve the general effect of their works. They have obviously striven to represent each member of the body with the utmost fidelity, but they were incapable of combining them harmoniously. Thus, we generally see reliefs with the faces in profle, the chest nearly facing us, and the legs again in profile, a peculiarity which recurs in the works of other Oriental nations, and even in those of the Greeks of the early period. This defect was at length overcome by the Greeks, but of the Egyptian artists it continued permanently characteristic, just as their heroes invariably retain the primitive distinction of being delineated in much larger proportions than other persons. Hampered by these immutable rules as to proportion (which were modifled twice only in the course of several thousand years), Egyptian art appears to have been seriously checked in its growth, and to have entered, after a brief period of efflorescence, on a long era of what may be termed Byzantinism, - and yet in many respects the Egyptian sculptures merit our highest admiration. The artistic effects capable of being produced in any given material, such as granite, were always calculated with the nicest discrimination; nothing capable of achievement is left undone, and beyond this nothing is attempted. The sculptors are notable for their knowledge
of anatomy, for their accuracy in the delineation of muscle, for their skill in portraiture, and for their fidelity in representing animal life. Of all the Egyptian works the figures of the gods are perhaps the least happy. To us they seem to exhibit a want of taste

and intelligence; but this is perhaps to be accounted for by the fact that they were intended to be worshipped only, and not admired. That the practice of art was very highly developed in Egypt is proved not merely by the great extent to which the division of labour was carried, but by the fact that the artists understood the process of copying flgures by dividing them into squares and calculating their proportions so as to be able to reduce or enlarge them at pleasure. As all authorities, however, concur in pronouncing the Egyptian artists perfect in point of technical skill; it would be superfluous to say more on this branch of the subject.

Besides the painting of the Egyptian plastic works, another peculiarity is the incision of the reliefs, which recede from the surface instead of being raised above it. These 'ccelanoglyphs', or 'reliefs en creux', which somewhat resemble pieces of embroidery, produce nearly the same effect as paintings. Their object is the same, and the style of composition, design, and artistic execution are nearly identical. No attention whatever was paid to tastefulness in grouping or uniformity of arrangement, the separate scenes being merely placed beside or over each other; but, individually, these are remarkable for distinctness and excellence of execution, and they afford us a far more vivid picture of the life of the ancient Egyptians, their customs, their wars, and their religious rites, than any written chronicle could have afforded. In artistic finish, on the other hand, these scenes are defective, and the colouring has no independent value, being merely used to make the figures stand out more distinctly, and imitating nature in the crudest possible manner.

In the province of artistic conception we find Egyptian im
agination fettered by traditional bonds which it made no effort to break; but in the practice of the handicrafts Egypt was perfect. The goldsmiths and workers in metal in particular had attained the most complete mastery of their craft; they thoroughly understood all its ancillary arts, such as enamelling and Damascene work, and they were thus able to produce works of a degree of finish such as a highly civilised nation alone could execute and appreciate.

The traveller should note the signification of some of the Symbols and Signs most commonly used in the ornamentation of the columns and other parts of the Egyptian temples. Thus, $\hat{\text { is the }}$ crook or shepherd's staff, the emblem of the leader or monarch; a scourge, the symbol of kingly power. When both are in the hand of the same figure they perhaps import the power of restraining and of urging onwards. Then $f$ a seal, the symbol of life;塞 Nilometer, the symbol of steadfastness; crown of Lower Egypt; $\langle\sqrt{ }$ the white crown of Upper Egypt; the united crown of Upper Egypt and Lower Egypt; $\left\{\Omega\right.$ and ${ }^{\circ}$ the Uræus serpent, represented on diadems and suns by Of. The Uræus serpent, possessing the power of life and death, was the emblem of kingly power. The sceptre, $\{$ user, denoted authority of various kinds, power, wealth, and victorious strength. The sceptre $\}$, which is read $\hat{u} s, t^{\prime} a m$, or ouab, indicates the name of the Theban nomos; $\longrightarrow$, a basket, signifies a master; $\square$, a decorated basket, a festival, or solemn assembly, at which offerings were made in such receptacles; $\int m a \hat{a}$, an ostrich-feather, truth and justice; $\longrightarrow$, ran, the frame surrounding the names of kings. signifies the name; kheper, the scarabæus or beetle, the principle of genesis and regeneration. The precise meaning of the symbol $W$ is unknown, but it is read sam, and signifies union. It is frequently observed at the foot of statues, entwined with aquatic plants, where it is symbolical of the union of Upper and Lower Egypt, and perhaps of the union of this world with the next. The lock \} on the temple of a figure marks it as a child, generally the offspring of the gods or of the kings.

## IX. Greek (Alexandrian) Art in Egypt.

## By Professor Theodor Schreiber of Leipsic.

Early Egyptian Art did not die out with the Pharaohs; both under the Ptolemies and, later still, under the Roman emperors, temples in the old style were raised, restored, or enlarged, and were adorned as before with statues, frescoes, and obelisks, while the worship of the old national gods was continued in them unchanged. But the new rulers and the Greeks who immigrated with them established Hellenic customs, art, and science in Egypt, as they had been established in the other kingdoms of Alexander's successors. Alexandria, the mighty creation of Alexander the Great, destined to be the centre of his empire, became, as the residence of his successors, the Ptolemies, who distinguished themselves as patrons of learning, the central point of the intellectual interests of the Hellenic world, though Athens, of course, still retained some of her old supremacy, and Pergamum at a later date also entered the lists. In the Museum of Alexandria investigations concerned with the direct observation of men and things, were carried on side by side with the literary and historical studies of scholars. Poets and artists gathered in crowds at the brilliant court; and the royal passion for building undertook tasks undreamt of by earlier Greek art, and which, indeed, with its limited resources, that art could never have achieved. East and West met in Egypt, and the most diverse peoples - Greeks, Egyptians, Jews, Negroes from the interior of Africa, etc. - mingled there in the closest association, in which the Greeks, though the dominant element, adapted themselves to many of the native religious and social customs, and learned to keep their eyes open to the good qualities of their neighbours. Thus there arose in Egypt the neo-Greek culture which we are accustomed to call Hellenism. The earlier illiberal limitation of Greek interests to Greekspeaking countries was exchanged for a cosmopolitan liberality; classical culture enjoyed a second flowering-time, which harbingered the culture of the Roman imperial epoch and indeed that of the Renaissance also.

This new impulse, which put forth fresh shoots in all branches of literature, was especially advantageous to the plastic art of the Greeks, which found its chief centre at Alexandria. Purely Hellenic in its roots, this art (in contrast to the ancient classical art which lingered on unchanged in Athens) assumed under the above-mentioned influences a character that is striking for its modern spirit. In many points it may be compared with the baroque style in modern art. Its historical importance consists mainly in the fact that it became the favourite mistress of the artists of Rome. In countless monuments of the imperial epoch the influence of peculiarly Alexandrian models will be detected in the intermixture of Egyptian motives - Egyptian landscapes, Egyptian animal-figures, and iso-
lated details borrowed from early Egyptian art. It is obvious, for example, that the celebrated statue of the Nile in the Vatican could have been conceived only under the influence of the Alexandrian school. In many other instances the careful student in European collections must have been struck by Greek works of art, whose subjects plainly suggest an Egyptian origin; and a comparison of these sculptures with each other would show that in many cases their style and conception also exhibit a peculiar impress. The Egyptian collections in the larger museums afford the most convenient opportunities of studying the traces of this art, once richly developed but now historically almost extinct. These museums also contain relics of the Alexandrian art of the Greek or Roman period, the British Museum and the Museums of Berlin and Turin being especially rich in this respect.

The great buildings of the Greek period in Egypt have gradually disappeared almost without leaving a trace, though some lingered until this century, for the simple reason that most of them were built of marble which could be used conveniently as material for other buildings or for lime-burning. The majestic Alexandrian Serapeum with its forest of pillars has disappeared, leaving as its only relic the so-called 'Pompey's Pillar' which originally stood in the middle of the temple-court. Yet in size and conception this building was one of the greatest creations of ancient Architecture, and the flrst achievement of the new style originated by Deinocrates, the gifted architect of Alexander the Great, which exhibited a combination of Oriental and ancient Greek forms. From the East were borrowed the art of wall-incrustation (here used for the first time), the principle of building domes with a sky-light at the apex (in the style of the Pantheon at Rome), and the system of building upon terraces. The Serapeum, the common national sanctuary of the Greeks and Egyptians, was elevated high above the city by means of a huge substructure in several stories, which served as its basis. The lowest story of this foundation-building had domes of the kind described above; the second, somewhat retreating, story was similar; and still higher were a third and a fourth story. The platform on the top, reached by a staircase of a huudred steps, formed a spacious temple-court, which was surrounded with colonnades and adorned at the entrance with propylæa and in the centre with the above-mentioned huge column, on which probably stood the statue of Alexander as founder of the city. The temple, with the colossal statue of Serapis, occupied the background. This colossus and the temple itself were experiments in the new style of incrustation just introduced from the East. The statue of Serapis is said to have included six different metals, besides all kinds of gems, but the exact method of its construction is still uncertain. It was apparently, however, related to the new style of wall-decoration, which can be minutely traced in its prototypes, beginning, and progress. The walls of Babylonian
and Persian royal palaces were built of sun-dried bricks and then faced with slabs of alabaster, glazed tiles, or even with gilded metal plates; in like manner the brick walls in the buildings of the Ptolemies were covered - first of all, it is said, in the Serapeum - with slabs of marble, glass, or metal, and were adorned with friezes, reliefs, or mosaics. So late as the end of the 16th cent. the Italian traveller Filippo Pigafetta (1533-1604) saw in Alexandria fragments of walldecoration 'of wonderful work', in houses that had survived from antiquity and were still inhabited; and even in the present day the heaps of rubbish which have gradually accumulated above the ruins of antiquity have been searched through and through for the real and imitation gems once used in this mural decoration. Extensive remains of marble incrustation, which was of ten combined with the rarest varieties of stone, have recently been found on the coast of Alexandria near the old Quarantine (i.e. in the region of the royal palaces), and have been examined by the German geologists Fraas and Schneider. From Alexandria this style of wall-decoration was introduced into Rome under the emperors; but it had been known and practised centuries before on the Campanian coast, where this new decoration awoke to a new life, partly in the richest forms (as in the buildings of Baix), and partly only in stucco or even painted imitations. The architectural paintings of Pompeii, which are entirely dependent upon Alexandrian prototypes, convey perhaps the best idea of the varied patterns of this art, and more especially of the peculiar character of the Alexandrian baroque style, which expressed all the freshness of its fancy in novel forms of columns and beams, in the charming grouping of spaces, and still more in the union of architecture with formal gardens.

Not much more than the names have come down to us of a number of large buildings of the Ptolemies, each of which doubtless represented an architectural adrance. Such were the Soma, or Mausoleum of Alexander the Great, the harbour-works (Heptastadion and Diabathra) which united the city and the island of Pharos, and the Alexandrian Temple of Pan, which rose in the form of a hill. The last relics of the Telesterium, a temple built by Ptolemy II. outside the E. gate of the city for the celebration of the Eleusinian mysteries, were destroyed about the middle of the present century, before scholars had found time to examine them carefully. All that remains of the Greek Serapeum, in the necropolis of Sakṭâra, now lies buried again in the sands of the desert, except the sculptures brought to light in the first excavation, some of which are now left to disintegrate in the open air (comp. pp. 166 et seq.). Suffcient atteution has not yet been paid to the position in architectural history of the technically unique Aqueduct of Alexandria, which was corval with the foundation of the city, and stretched its subcerranean canals along all the principal streets, supplying the cisterns which were found in every house and some of which are
still in existence. Of the palaces and villas of the Ptolemies, of the celebrated lighthouse on the island of Pharos, of the Gymnasium situated on the Dromos or chief street, and of a few other buildings we learn from ancient authors enough at least to justify us in surmising that they served as models to the Roman architects for similar ediffces. The building of Alexandria was the first example on a grand scale of the systematio laying out of a city on a homogeneous plan, with its regular network of streets cutting each other at right angles and bordered with colonnades, its long vistas, and its symmetrically disposed public buildings; and it was imitated in innumerable subsequent foundations. The latest of these was Antinoë, founded by Hadrian on the Nile, the lingering remvants of which were not finally destroyed until the present century. The Rue de Rosette in modern Alexandria marks the line of the ancient main street, which united the E. and W. gates of the fortifications; and numerous remains of the double colonnade with which it once was bordered, are seen in the fragments of columns in the neighbouring houses and gardens.

These comprehensive architectural undertakings were naturally accompanied by a corresponding activity in the domain of Sculpture. Both under the Ptolemies, and afterwards under the Roman emperors, this art was especially employed, as it had been under the ancient Pharaohs, in producing statues and busts of the royal family. Besides its monumental creations, of which scanty relics only are now extant, it was wonderfully prolific in genre compositions and decorative sculpture. The extant sculptures may be easily divided into three classes according to their style. The first class comprizes the works of native artists affected by Greek influence, who adhere in general to the traditional canon, but display a purer taste in the treatment of the face and in the attitude and modelling of the figure. Thus the colossal statue of a Macedonian king (said to be Alexander II.), which was found in the temple-precincts at Karnak and is now in the Museum of Gîzeh (Room XL, No. 308), is erecuted, as regards its general arrangement, in conformity with the ancient Egyptian scheme of statues, while its face and hair are treated in a freer manner. The Egyptian sculptor of the portrait-statue of a native scribe found at Alexandria ( $N o .294$ in the Gîzeh Museum) has gone still further. Not only has he abandoned the crouching posture traditional for such subjects, but he has also imitated as closely as possible the Greek style in the attitude, the shape of the head, and the folds of the drapery; though at the same time the stiffness of the position, and still more the pillar at the back with its hieroglyphic inscription, clearly announce the origin of the artist. A smaller group of statues and reliefs are apparently the works of Greek immigrants, who brought with them, and practised unchanged, an art acquired abroad, and mainly inspired by Athenian ideals. Examples of this Alexandrian 'Ideal Style' are to be seen in the splendid Head
of a Gaul in the Gîzeh Museum, which deviates considerably in style from the well-known realistic Gauls' heads of the Pergamenian school; a sepulchral Stele in the same Museum (Room XL, No. 289); and the beautiful Head of Alexander in the British Museum. The most important achievement of this school was the above-mentioned colossus of Serapis in the Serapeum at Alexandria, the work of a sculptor named Bryaxis, who seems to have been an immigrant from Caria; and this may still be reconstructed in its details with the help of numerous larger or smaller copies. The colossus represented the mysterious deity sitting on a throne, with Cerberus by his side, and crowned with the corn-measure, the emblem of fruitfulness. The grave countenance framed with flowing locks presented him as the ruler of the kingdom of the dead and as the beneflcent saviour, in a manner recalling the conceptions of Zeus, somewhat as the colossal head in the Gîzeh Museum (No. 306) represents him.

The sculptors of Smaller Works of Art also were at first entirely dependent upon the Greek motherland. Thus for terracottas they borrowed models from Tanagra, so that numerous Egyptian terracottas have been found absolutely identical with the wellknown Tanagrefigures. But it was just in the studios of these sculptors that an independent spirit manifested itself at a very early date. Their art emancipated itself from the imported forms and motives, and found a new method of expression for fresh materials supplied directly from the experiences and environment of the artists. This peculiarly Alexandrian art shows a character in complete contrast with the above-mentioned ideal school ; its basis is the most uncompromising Realism. Its favourite subjects, frequently treated in a humorous or satirical vein, were common scenes from the streetlife of the metropolis, which seems in many points to have been similar to that of the modern Arab quarters of Cairo and Alexandria. Thus, for example, in a bronze group from the Delta (now in the Polytechnic at Athens) we see a Nubian fruit-seller crouching on the ground and snatching a siesta behind his tastefully arranged wares, while an ape, seated on his shoulder, carries on investigations in his master's hair. Another bronze, of similar origin and in the same collection, represents a slave with the typical head of the Akka negroes somewhat caricatured, hastily devouring a stolen piece of meat. From the same place also comes the basalt figure (now at Athens) of a Nubian boy carrying a burden on his raised left hand, while the elbow is supported on the hip, in a manner customary to this day. These three statuettes are masterpieces, not only in technique but even more in their keen conception and reproduction of racial characteristics. Numerous specimens of similar street-types will be found among the Greek terracottas in the museums at Cairo and Alexandria. We can best see what were the favourite subjects of the Alexandrian sculptors, and how they were treated, from those
familiar works of humbler art, which of course had their models in the higher branches; from the designs on terracotta lamps; and from the small bronze figures which are found in great numbers in the Nile Delta. Many of the motives would be well adapted for foun-tain-figures, if executed on a larger scale, and they were probably originally devised for this purpose ; such are, e.g., the boy seated on a stone with basket and fishing-rod (a bronze from the former Pugioli collection at Alexandria), and the recumbent figure of a Satyr leaning on his wine-skin, and causing a jet of water to issue from it (Gìzeh Museum at Cairo). Many subjects again were taken from the theatre and the wrestling-ring, and still more from the popular pleasure-resorts in the streets; for the Alexandrians, notorious for their love of pleasure and enjoyment of ridicule, took peculiar delight in jugglers and mountebanks of all kinds, and in dwarfs and cripples, etc. Caricatures, sometimes of the most doubtful character, thus form a considerable fraction among the productions of this art. At the same time the artists preserved also a certain strain of idealism, shown in their inclination to present these genre motives in mythological setting, as when they represent Satyrs and Cupids in all kinds of genre situations, Aphrodite beating the mischievous Cupid, Hercules staggering home intoxicated from the banquet, etc.

The suitability of this art for decorative purposes is apparent even in these creations. But it makes a farther advance in this direction in the reliefs, the most developed form of which, the pictorial relief with landscape background, also took its rise under the influence of Ptolemaic art. The so-called Campanian reliefs, a series of terracotta compositions which were placed side by side after the manner of a frieze, must, in spite of the fact that they have been found for the most part in Italy and are abundant in Italian museums (several good specimens in the Gîzeh Museum, Room XLV, Cabinets A and G), owe their origin to Alexandrian studios, seeing that the ornamental form of these friezes, and still more the Nile-scenes and the figures in the Egyptian style, which are sometimes accompanied by hieroglyphics chosen at raudom, obviously point to this origin.

The most fashionable art under the Ptolemies, in which Ptolemy II. Philadelphos engaged with his own hands, was the Greek Goldsmiths' Work (Toreutic). Its productions were used not only to adorn the royal table and the sumptuous rooms of the palace in the Bruchium, but also lent splendour to the processions which formed part of the brilliant court-festivals. From the description of one of these festivals which has come down to us through Kallixenos of Rhodes, the royal treasure of the Ptolemies appears to have been extraordinarily rich in the costliest gold and silver plate. But delight in gold and jewelry prevailed also among the simplest classes of the citizens, as is proved by the multitude of ornaments found in the Graco-Roman necropoles. We obtain an idea of the wares fashioned by the Alexandrian goldsmiths for these middle classes of the population, from the moulds
and stamps, the stucco models, and other utensils and tools that have been preserved. It is more than probable that the magnificent silver treasures of Hildesheim and Villeret, the silver goblets of the Casa dell'Argenteria at Pompeii, and others of the most perfect extant specimens of Greek goldsmiths' work, are actually original productions of Alexandrian studios. Considerable discoveries of this kind have been brought from Egypt within recent times. The Gîzeh Museum contains a number of candelabra, censers, vases, and other good bronzes, the complete resemblance of which in form and decoration to the Campanian copies now preserved in the National Museum at Naples can hardly escape notice.

While almost no documentary information about Alexandrian sculpture has come down to us from antiquity, we are, on the other hand, tolerably well informed as to the Painting that flourished in Egypt after Alexander the Great. We have documentary accounts of a number of important painters with their names and works. Antiphilos, a native of Egypt and a pupil of the little-known Ktesidemos, seems to have been the most famous of these. He was celebrated not only for his skilful execution but also for the versatility of his fancy; and he painted both portraits and genre-pictures as well as larger mythological compositions. Some of the subjects treated by him (Rape of Europa in sight of the horrified King Cadmus; Hesione freed by Hercules) are met with in Pompeian mural paintings, which we may therefore, perhaps, regard as direct copies. Among his portraits are mentioned two of Alexander the Great, and a huntingscene with the portrait of Ptolemy I. The accounts of his genrepictures are rather more important. In one of these he depicted a weaving-shop, with women weaving, and in another a dark room lighted only by the fire in a brazier, which a boy was trying to blow into flame. The half-light in the room and the reflection of the fire on the boy's face were said to be admirably reproduced. He dealt with a similar problem of colouring in his picture of the Aposkopeuon ('On the Outlook'), representing a Satyr shading his eyes with his hand and gazing into the distance. We must therefore think of this artist as a master of chiaroscuro and of the art of representing transparent shadows and strong light-effects. Like a true Alexandrian he made a name for bimself also as a caricaturist. His pictures of dancing jugglers (Grylli) have been copied in all possible variations on gems and in reliefs, and also in the wall-paintings at Pompeii.

From this tendency towards the grotesque and comic there was developed a distinct branch in Alexandrian art, that, namely, of Satirical Painting. The idolatrous reverence for Homer, which had spread among the scholars and poets of Ptolemy's court and had, indeed, reached the dignity of a cult with temples and images of its own, is said to have been satirized by Galaton, a painter of this school, in a picture which represented Homer in the act of relieving all overloaded stomach, while his worshippers extended their hands
to catch the precious evacuations. Galaton prohably lived about the time of Ptolemy Philopator; and a little later, under Ptolemy Philometor, a new hranch of Alexandrian art, viz. Landscape-Painting, had already reached such a pitch of development, that Demetrios, an Egyptian landscape-painter, was ahle to attain consideration and prosperity in Rome, which at that time was little awake to the claims of art, and even to afford shelter to the banished ruler of his native land.

Historical Painting had also its representatives in Egypt. We hear of a painting of the battle of Issos executed by 'Helena, daughter of Timon the Egyptian'; and we may surmise, though we cannot prove, that this was the original copied in the celebrated Pompeian mosaic of Alexander the Great. At the same time numerous circumstances point to the conclusion that after a certain date Alexandrian painters and mosaicists were very largely employed in Pompeii, and these would naturally make a free and unrestrained use of the favourite compositions of their native land.

In Egypt itself no wall-paintings in the Greek style and of the better period have heen found; none at least have reached the museums. The painted sepulchral steles and vases exbibit a homely, unpretending, mechanical art in their flgures. There is another large class of paintings comprising the Portraits attached to the heads of mummies, painted on thin wooden tahlets, in tempera, or in encaustic colours, or in a style uniting hoth these methods; and prohahly the technical delicasy and freshness of conception which was still characteristic of Alexandrian painting at the imperial epoch expressed themselves in these. The practice of furnishing the mummy-covering with a portrait reproducing the features of the deceased dates from early Egyptian times. In the Hellenistic period masks modelled in stucco and coloured, or paintings upon wood were chosen for this purpose, in order that the features of the deceased might be portrayed as those of a living person. In most cases in fact, even in portraits of the rudest make, the lifelike expression is surprising. They look as though they were executed from the living model, so that the theory that they were posthumous portraits is not very prohahle. At the hack of some of these portraits a layer of mortar, abont an inch in thickness, has heen found, and in others there are holes, which seem to have been meant for nails to fasten the picture to the wall; and from these circumstances we may conclude that portraits of this kind used to be painted as ornaments for rooms during the lifetime of the persons represented, and that they were removed from the wall and placed on the mummy-covering after death, except when it was preferred to suhstitute copies of the originals. From the investigations which Prof. Georg Ebers has devoted to this class of portraits, it would seem that most, if not all, of the specimens yet known come from the cemeteries of the Fayûm. The persons represented are mostly Hellenistic Egyptians of Greek origin. but there are also found amongst them Græco-Egyptian half-hreeds,

Romans, people of Ethiopian descent, and a tolerably large number of Semites (Jews and Phœnicians). For reasons which Ebers has more minutely explained and which are not merely stylistic, the best of these paintings cannot be more recent than the Ptolemaic period. They convey a high idea of the keen faculty of observations possessed by the painters, and of a usually free and light touch in the use of the pencil and paint-brush, which places these artists by the side of the best masters of modern art. These portraits have, moreover, a peculiar value in the history of art, as the only extant specimens of the remarkable style of work known as Encaustic Painting (wax painting), which obtained effects not much inferior to those of modern oil-painting, and far exceeded it in point of durability.

# X. Buildings of the Mohammedans. <br> Mosques. Dwelling Houses. 

By Franz Pasha, Architect at Cairo.
The Mohammedan style of architecture in the valley of the Nile was not, as might perhaps be expected, the immediate successor of the Egyptian, but was separated from it by that of the early Christian epoch, a period of six or seven centuries. This new style was not of native growth, but was imported from abroad, being of Arabiall origin, considerably modified by the forms of art which the victorious Arabs found in vogue among the Byzantines, and by those of Persian art of the era of the Sassanides. Different as the Arabian buildings at Baghdâd and Cairo may appear from those at Tunis and in Spain, they all possess certain features in common. The fundamental idea of all Mohammedan architecture originated in the nomadic life of the Arabs. The tent was the prototype, alike of the house and of the temple. The walls in particular, with. their carpet-like decoration, and their extensive, unrelieved surfaces, remind one of this origin. This style of architecture is that of the fickle children of the desert, whose edifices, even after they had become a settled and stationary nation, continue to convey an idea of unsubstantiality, and who never attained to a clear perception of the proportion to be observed between the support and the burden to be borne. This defect is less apparent in cases where the Arabian builders were brought under the influence of more civilised nations, where they employed columns, entablatures, and other fragments of ruined edifices which they found available, or where they were aided by Byzantine or other foreign architects, than in purely Arabian edifices; but in every ease the national characteristic is more or less distinctly traceable.

The buildings most immediately connected with the national traditions are the Religious Edifices, the leading feature of which consists of the Court, such as that seen at Mecca, which dates from a period even earlier than that of Mohammed himself. The walls
of the court, indeed, lost their primitive simplicity after their designers had been brought into contact with the colonnaded courts of Egypt and the Syrian regions, and the Columnar Court was thus developed; but the Arabian builders avoided using or imitating Egyptian columns. They preferred the columns or remains of columns of the Alexandrian and Roman period, as the massive proportions of those of the Egyptian style were less appropriate to a light and open structure than the columns of the richly decorated Corinthian order.

They borrowed their cornicings, which they employed but sparingly, and their mosaic ornamentation, such as arabesques, from the Byzantine models which they found in Syria and in the oldest Byzantine-Christian edifices of Egypt, and their pointed arches and domes chiefly from the region of the Euphrates. At the same time they contrived to impart to their works a certain individuality of character, partly by the elegance of their forms and the preference given to superficial over architectural decoration, and still more so by the peculiar character of their ornamentation, resembling the patterns of textile fabrics, and obviously imitated from walltapestry. Similar patterns appear also in their latticed windows, their carved doors, and their diapered balconies.

The Exterior of these buildings is generally plain, consisting of a lofty, rectangular enclosing wall of quadrangular plan, but not entirely without relief in the form of projections and indentations. In the mosques there are usually minarets and domes projecting beyond this general outline, and this is still more commonly the case with the public fountains (sebîl) and the mosque schools (medreseh) above them. The portal, on the other hand, and certain perpendicular sections of the building of various widths, generally recede a little, the latter a few inches only, being again brought forward immediately below the cornicing to the level of the façade by means of a 'stalactite' corbelling. In these last also the windows are often inserted with little regard to symmetry. In the corners of the projections thus formed, as well as in the other angles of the building, we frequently find columns of marble inserted, or columns hewn out of the material of the building, and detached to the extent of three-fourths of their thickness. The whole plan of the stone façades, which is not devoid of a certain degree of grandeur, reminds us of those of the ancient Egyptian temples, although the Muslims were generally scrupulously careful to avoid every resemblance to the pagan buildings. The portal is generally the richest part of the edifice. The windows are simpler, and less importance is given to the principal cornice than the height and other dimensions of the building would seem to demand.

The Portals consist of rectangular uiches, of such depth as to allow room on the left and right outside the door for the mastabas, or stone-benches used by the doorkeeper (bawwâb). This door-
niche in the mosques rises nearly to the full height of the façade, and terminates at the top either in a sphere, or in a polygonal halfdome, partly ribbed, and partly embellished with pendentives or 'stalactites'. The two perpendicular mural pillars of the niche approach each other towards the top, either in curved or in straight lines converging at an acute angle. In neither case, however, do they actually meet, the niche terminating above in a hemispherical dome, which springs from the converging lines. The form of the entrance varies considerably. In some cases it terminates above in an architrave, in others in a round or pointed arch, while fantastically waved or broken-arch forms are also not uncommon. The commonest style in the mosques is the architrave form with segmental relieving arches. A favourite practice was to pave the threshold with an ancient block of red or black granite, even if covered with hieroglyphics, and in many cases these venerable inscriptions are still traceable. In the mosques, on the resting-place in front of the door, is a low railing which marks the boundary to which the visitor may penetrate without removing his shoes or sandals. $\dagger$

The Windows are more commonly rectangular than arched, and are sometimes grouped in twos and threes, in which case they are often tastefully adorned with round, oval, or star-shaped rosettes in plaster, perforated, and filled with coloured glass. This arrangement has many points of resemblance to the Byzantine and Romanesque styles. The windows in the façades are frequently surrounded with scrolls in low relief, and with flat bands or rollmouldings. On the inside they are usually adorned with friezes in plaster with arabesques.

Special importance was attached to the principal doors of monumental buildings, which, as a rule, were massively mounted with iron or bronze, or were constructed of pieces of wood of different colours, ingeniously fitted together. The portals of some of the mosques are embellished with bronze decorations, beautifully embossed and chased. The doors in the interior of the buildings are often richly inlaid with ebony and ivory.

The Dome, a very salient feature in Mohammedan buildings, especially in the mosques and mausolea, varies much in form; the base of the structure projects beyond the square groundplan of the edifice, and the summit rises above the enclosing wall. The dome, which tapers upwards in an elliptical form and is adorned with knobs and crescents, is blended with the quadrangular interior of the mausoleum by means of pendentives; while, externally, the union of the cube with the sphere is somewhat masked by the polygonal base of the dome. In some cases the transition is effected by means of gradations resembling steps, each of which is

[^19]crowned with a half-pyramidal excrescence of the height of the step. These excrescences might be regarded as external prolongations of the pendentives of the interior, but do not correspond with them in position. The architects, however, doubtless intended to suggest some such connection between the internal and external ornamentation. The domes are constructed partly of stone and partly of brick, the pendants being of stone, or of plaster and lath-work, and they are sometimes of considerable length. The finest are probably those of the Khalifs' Tombs. The greatly elongated domes of the Mameluke tombs have a second dome structure in their iuterior. The latter, lying much lower, supports walls placed in a radiating form, which bear the upper dome. One of these dilapidated tombs (p. 80) affords a good opportunity of examining this mode of construction. Near it there is also a dome with a lantern, a form quite foreign to the customary style of Arabian dome building.

It is a mistake to suppose that the joints are not cut in a straight direction, but were formed in curved or broken lines which required each stone to be an exact counterpart of its neighbour. This arrangement is occasionally seen in the case of straight or flat segment-shaped plinths, but even there this kind of construction is often merely simulated by means of inlaid marble of different colours.

The Minarets (from the Arabic menâreh, 'a signal' or 'signalpost') are generally square at the base, tapering upwards, story by story, until the form at length changes to that of an octagon or cylinder. On these towers the architects have expended their utmost skill, and the spectator will not fail to be struck by their graceful proportions. The highest story is sometimes formed of pilasters, or columns, which bear a roof, either consisting of one or more dome-shaped protuberances with the symbol of El-Islâm, or of a simple conical point. They are generally built of substantial masonry, and contain Winding Staircases of stone leading to the galleries of the different stories and to the balconies between them. From these last the mueddins summon the faithful to prayer ( $\mathrm{p} . \mathrm{xci}$ ). The galleries are borne by projecting cornices, and the balconies by brackets of similar construction. The wooden rods and hooks at the top of the minarets are used for hanging up the lamps during the fasting month of Ramaḍàn. The mosques were also formerly provided with external platforms (called mabkharas), on which incense used to be burned on high festivals, so as to diffuse sweet perfumes throughout the whole neighbourhood. The mosque of El-Hâkim is now the only one which still possesses platforms of this kind.

The Public Fountains (sebîls), with the Mosque Schools (medresehs) on the first floor, are frequently included within the rectangular precincts of the mosques, but they sometimes project from them in a circular form. The exterior of these buildings, and also of the open
colonnades used for scholastic purposes, is frequently adorned with detached columns, which is not the case with the religious edifices.

The Interiors of the mosques, on the other hand, are freely embellished with columns, the court being usually bordered by a colonnade, which is doubled or trebled on the side next the prayerniche (kibla).

Cairo presents no example of a distinct Arabian order of column, and hardly a single Arabian capital, those actually executed by Arabs (such as those adjoining the prayer-recess of the mosques) being imperfectly developed, and copied from Byzantine and Ptolemæan models. The form of capital which seems peculiar to Cairo is very simple and is also used as a base. Proceeding from the four corners of the abacus in curved lines are four surfaces which unite below with the ligature of the round or octagonal column. The numerous columns which adorn the mosques and private houses originally belonged, almost without exception, to Roman or Ptolemæan structures, and sometimes to Christian churches. The Mohammedans did not, however, employ columns belonging to the ancient Egyptian temples unless they had already been remodelled and used in Greek or Roman structures. Thus the Roman pedestals with remains of hieroglyphics occasionally seen in the mosques must originally have belonged to Egyptian temples. The architects of the mosques collected the columus they required for their purpose with little regard to their dimensions. If they were too short, a pedestal, or a reversed capital was placed beneath them, regardless of the order to which it belonged. Ionic and Corinthian columns are mingled promiscuously, and a certain degree of uniformity in the architecture is only observed when the abacus is reached. On this last lies a second abacus of sycamore wood secured by a wooden bar, from which lamps are frequently suspended.

The arches of the Arcades are almost invariably pointed, being at first round, while their sides go off at a tangent near the top; or they gradually assume the keel-shape, being slightly curved inwards below in the shape of a horseshoe. There are also other forms which approach still more nearly to the Gothic pointed arch; and there seems little doubt that this form, so early and so generally employed at Cairo, was exported thence to Sicily, and became the type which afterwards extended to Northern Europe. Beyond this resemblance in the form of the arch, however, and in some of the details of the windows, the pointed style possesses nothing in common with the Arabian. The Gothic gateway of marble between the mosques of Kalaûn and Barkukîyeh (p. 70) in the Derb el-Naḥ̂âsîn must, therefore, be regarded as a work executed under European influence. The popular account of it is that it was brought from some island.

The arcades of the mosques and other spacious halls are covered with a flat Ceiling of open-work, of almost uniform height. The
junction of the walls and ceiling is generally masked by a pendent cornice, or a cornice with a frieze for inscriptions. The beams used in the construction of the ceilings are generally square at both ends to a length of 3-5 ft., beyond which they are rounded below, and frequently carved. The interstices between the beams are sometimes divided into 'coffers'; and proper coffered ceilings also occur, as in the mosque Ṣalâheddîn Yûsuf in the citadel (p. 55). In the corners of the apartments, as well as under the principal architraves, pendants are generally placed to conceal the angles. The earliest ceilings appear to have consisted of palm-trunks, and to have been covered with boards of sycamore wood, which were often richly carved. The space immediately in frout of the kibla (prayer niche) usually terminated in a dome borne by columns. Spherical and groined vaulting was used for smaller chambers only; but the aroades of the Barḳûk mosque (p. 76), with their depressed spherical brick vaulting, form an exception to this rule. In secular buildings the use of vaulting is much more frequent, as in the case of the city-gate Bâb en-Naṣr (p. 72) and other arched passages. The entire groundfloors of palaces are also sometimes vaulted, and bridges and aqueducts were usually executed in barrel vaulting, or with pointed arches.

The Decorations generally consist of panelling or flat paintings, destitute of structural meaning, while pilasters, cornices, and other architectural embellishments are rare. This species of ornamentation was doubtless originally suggested by the carpets, fringes, and mats, used by the Arabs for covering their walls. The stalactite corbellings, on the other hand, which mask the union of the vertical with the horizontal parts of the building, and take the place of the vaulting used in western architecture, are of a more structural character; but even these perform no real architectural function, and form a mere fantastic decoration of the angles of the domes.

The panel and frieze decorations are either foliage, geometrical flgures, or written characters. The Foliage is usually shaped in rectangular relief, with a few incisions to divide the broader surfaces. The moulding is generally more or less in conformity with the spirit of the classical style, but in the conventional arabesques the leaves and other parts of plants of a southern climate are recognisable. The Geometrical Figures consist either of a kaleidoscopic arrangement of constantly recurring fantastic forms, or of a series of intertwined and broken lines. Lastly, the Arabic Written Characters with which the friezes are often decorated, and more particularly the Cufle and Sullus characters, are peculiarly well adapted for ornamental purposes, as they resemble decorative foliage, although destitute of its strictly symmetrical and continuous character. When the writing is employed for lengthy inscriptions in low relief, the ground on which it is placed is generally covered with slightly raised arabesques.

Baedeker's Egypt I. 3rd Ed.

Panels or friezes bearing inscriptions of this character produce a very rich and pleasing appearance. When viewed from a moderate distance, especially if enhanced by colouring, the broad characters stand out with great effect. The ground then resembles a network of lace, the delicate lines of the arabesques being indistinguishable except on close inspection. Sultan Hasan's mosque (p. 52) contains a remarkably handsome frieze of this description. The large and bold characters on the mosques or private houses which strike the eye of the traveller are almost invariably texts from the Korân, while historical notices in a small running character are often inscribed on marble slabs over the entrances and on the latticework of the sebills, where they are sometimes carved in wood. Similar inscriptions also occasionally occur in the halls of the interior.

The observer can scarcely fail to be struck with the apparently capricious way in which this ornamentation is distributed, the artist having sometimes lavished the whole richness of his arabesques upon certain spots to the neglect of others. When this peculiarity is more closely examined, it will be found that the parts thus favoured are - (1) the Portals, which are embellished with a framework of rich friezes, with rosettes to mark certain points, with artistic sculpturing on the architrave, and with pendants in the ceiling of the niche; (2) the Minarets, which it was customary to place over or adjacent to the portals, but seldom from structural motives; (3) the external surfaces of the Dome, which are sometimes covered with arabesques, and sometimes with roll-mouldings or wreaths; (4) the Kibla, with its handsome border, its capitals and columns, which are often rich and beautiful, its fine mosaics, its miniature pseudo-arcades; (5) the Pendants in the interior of mausoleums; (6) the Ceilings; (7) the Mimbar (pulpit), which is partly in stone and partly in wood. The lattice-work, windows, doors, couches or sofas (dikkeh), lanterns, and lamps are also much ornamented. These last are sometimes made of very curious enamelled glass, but few are now to be found in the mosques.

Colour does not, perhaps, play quite so conspicuous a part in the Egypto-Arabian monuments as in the Spanish; but the Egyptian artists, like those of the Alhambra, were also much addicted to the use of bright colours, especially red, blue, yellow, gold, and white. The ground of the decorative inscriptions is frequently deep blue, while the letters are usually gilded. On the whole, however, painting was never so highly developed here as in Spain, where the artists showed a certain appreciation of perspective by painting the lower parts of their walls with dark colours and gradually shading them upwards with lighter and more brilliant tints. In their colouring, as well as in their ornamental reliefs, it is obvious that the Egyptian artists aimed at producing effect by contrasts. The pavement consists of the richest marble mosaic, for the most part in dark colours, the walls are generally painted, and the cornice
and ceiling richly coloured and gilded. In the more important private houses we sometimes find the walls covered with majolica. The traveller will also be struck with the beautiful effects of colour produced by the Inlaid Work in the kiblas of certain mosques (the tombs of Kalâûn, Tulûn, and Kâït Bey), where marble, porphyry, mother-of-pearl, and Venetian enamel have been combined. In the case of Cabinet Work the colours used for inlaying are dark brown, black (ebony), white (ivory), and bronze. Externally the dark, yellowish stone of which the buildings were constructed produced a naturally pleasing effect, which the architects occasionally endeavoured to enhance by colouring every alternate course red or black; while important parts were adorned with marble mosaic, majolicas, panelling, and gilding. Owing to the mildness of the climate of Egypt much of the original colouring has been preserved, but it must not be confounded with the rude and staring painting of stone façades and marble ornaments executed on the occasion of the opening of the Suez Canal in 1869.

The secular edifices, like the sacred, and particularly the Dwelling Houses, have also their characteristic peculiarities. The ordinary town-houses are constructed of stone oll the groundfloor, and generally have an overhanging upper story. The projecting parts sometimes rest on pillars, but more commonly on beautifully carved brackets of peculiar form, and are provided with a kind of bow-window, which serves the double purpose of ventilating the house and of affording a view of the street to the women concealed behind the lattice-work. The small perforated and generally octagonal balconies, with round holes at the bottom, are used for cooling the drinking-water in porous vessels (luullehs), whence they derive their name of Mushreb̂̂yehs (from sharâb, a draught). These balconies are rectangular in shape, but their sides are sometimes arched, and the lattice-work round them, composed of turned pieces of wood, often forms an ingenious and elaborate pattern. The roofs of these mushrebîyehs usually project in a tent-like form, and instead of cornices they have pendent friezes cut out of boards. The union of these projections with the surface of the wall below is generally masked by means of richly carved and elegantly waved mouldings with tasteful rosettes. Above the mushrebîyehs, which rarely extend to the height of the apartment within, there are usually introduced upper windows, with stucco frames, filled with stained glass. - The Cornices of the houses project but slightly, curving a little outwards when pendentives are not employed; and they are almost always crowned with pinnacles, which are often most elaborately executed. We may also mention the curious form of cornice seen in the Mameluke Tombs, where the projecting ends of the roof-beams are serrated.

While bestowing their full meed of praise on the wonderfully rich ornamentation and other details of Arabian architecture, one
cannot help feeling that the style fails to give entire æsthetic satisfaction. Want of symmetry in plan, poverty of articulation, insufficiency of plastic decoration, and an incongruous mingling of stone and wood, are the imperfections which strike most northern critics. The architects, in fact, bestowed the whole of their attention on the decoration of surfaces; and down to the present day the Arabian artists have always displayed far greater ability in tracing elegant outlines, and designing the most complicated ornaments and geometrical figures on plane surfaces, than in the treatment and proportioning of masses. Although we occasionally see difficulties of construction well overcome, as in the case of the interior of the Bàb en-Nass, these instances seem rather to be successful experiments than the result of scientific workmanship. The real excellence of the Arabian architects lay in their skill in masking abrupt angles by the use of 'stalactites' or brackets.

If we enquire into the causes of these defects in the development of art we shall find that the climate is one of the principal. Its remarkable mildness and the rareness of rain have enabled architects to dispense with much that appears essential to the inhabitant of more northern latitudes; and hence the imperfect development and frequent absence of cornices. The extraordinary durability of wood in Egypt, again, has led to its being used in the construction of walls, and in connection with stone, in a manner which would never occur to northern architects. Another circumstance unfavourable to the development of native art has doubtless been the ease with which the architects obtained abundance of pillars and capitals in ancient buildings ready to their hand. There were also political obstacles to the progress of art, such as frequent intestine struggles and dissensions, and the sway of despotic rulers and their servile officers; and, lastly, the characteristic Egyptian tenacity and veneration for tradition and religious precept have not been without their infiuence. The original design of the mosque, for example, was borrowed from Mecca, and no deviation could be made from its plan; and this accounts for the invariable recurrence of the same forms in the mosques of Egypt. In a few instances architects ventured to introduce innovations, but they never failed to revert sooner or later to the established style. The external architecture of private houses, however, being unfettered by religious considerations, might have progressed more favourably but for the powerful influence of superstition and fear. An external display of wealth, according to the popular notion, drew upon its possessor the 'evil eye' of the covetous, the consequence of which was misfortune or death, while, on the other hand, it afforded the government a pretext for extorting heavy taxes from the occupant. It therefore became customary rith the Egyptians to restrict any appearance of luxury to the terior of their harems, where it is exhibited in the sumptuous
furniture and hangings, and in the jewellery of the women. These indications of wealth are never seen except by the proprietor's nearest relations and the female friends of his wives, and are effectually concealed from the view of the government and of the general public.

With regard to Sculpture and Painting it will strike the traveller that the modern Egyptian chisel and brush have been reserved exclusively for the decoration of wall surfaces. Representations of animals occur rarely, while those of the human figure were prohibited by the Korân (comp. p. 14). The latter, however, are occasionally met with. One of the Ṭulunides, for example, caused a festal hall to be adorned with painted wooden statues of himself, his wives, and his favourite dancers; and at Cairo there was even a famous manufactory of figures of men and animals at that period. In the 11th cent., as we are informed, there were two celebrated painters at Cairo who vied with each other in the execution of relief pictures. One of them painted a dancer, who seemed to be disappearing into the wall, while his rival painted another who seemed to be coming out from it. El-Kitami's picture of Joseph in the pit was also a far-famed work. On the whole, however, these branches of art were but little developed, the Egyptians resembling the Israelites in this respect. The Arabs were more successful, however, in the prosecution of artistic handicrafts, and excelled in the embellishment of all kinds of implements in metal-work, enamel, inlaying, engraving, etc. Their decorative ingenuity, developed by these arts quite as much as by the wall decorations, and applied to textile fabrics also, has attained so wide a celebrity, that the word 'Arabesque' is now nearly synonymous with 'ornament'. The word 'Grotesque' was once similarly applied to the western style of decoration borrowed by Raphael and Giovanni da Udine from the 'Grottoes' of the Baths of Titus at Rome, and employed by them with singular success in the loggie of the Vatican, but this word has long since lost its original meaning.

The Mosques are divided, in accordance with their religious importance, into two kinds: (1) those in which the sermon ( $k h u t b e h$ ) is preached on Fridays, called Gâmi $a$; (2) those in which prayer only is offered daily except on Fridays, named Mesgid $\dagger$, or Zâwiya. The name mesgid, which has been imported from Constantinople, is less frequently used than Zâwiya, which denotes a small mosque, consisting of one chamber only.

The Muslims also repeat their prayers at the grated windows of the mausolea of their saints (shêlh, or weli; see p. xovi), behind which is visible a catafalque, covered with bright coloured carpets,

[^20]but by no means invariably containing the remains of the holy man. These weli's, or tombs of shêkhs, occur in every part of the country, being frequently built into the houses, and are easily recognised by their cubic form and their domes. They are rarely more than $4-6$ yds. square, and are generally whitewashed. The interior is often empty and infested with scorpions and vermin.

Every Gâmi'a has a court of considerable size, generally uncovered, called the Fasha, or $\boldsymbol{S}$ ahn el-Gâmiaa, in the centre of which is the Hanefiyeh, or fountain for religious ablution. On the E. side the court is adjoined by the $L \hat{\imath} w \hat{a} n$, covered with carpets or mats (Hasîreh), where the sacred vessels are kept. Between the Lîwân and the court there often runs a railing (Maksura) which separates the holy place of the Gâmi'a from the court.

In the Lîwân we observe: (1) the Kibla or Mihrâb, the prayer-niche turned towards Mecca; (2) the Mimbar, or pulpit, to the right of the Kibla, from which the Khatîb or Imâm addresses the faithful; (3) the Kursi (pl. Kerâsi), or reading-desk, on which the Korân (which is kept at other times in a cabinet of its own) lies open during divine service; (4) the Dikkeh, a podium borne by columns, and surrounded by a low railing, from which the Moballain (assistants of the Khatîb) repeat the words of the Korân, which is read at the Kibla, for the benefit of the people at a distance; (5) the various lamps and lanterns (Tanur, large chandelier; Thoraiya, lit. 'seven stars', small chandelier; Fânûs, lamp; Kandîl, small oil-lamp). By the side of the Șạ̣n el-Gâmi'a is another small court with a basin of water and other conveniences, which the faithful almost invariably visit before entering the sacred precincts. Adjoining the Lîwân is usually placed the mausoleum of the founder of the mosque, and farther distant, by the principal entrance, is the Sebîl (fountain) with the Maktab (elementary school). Under the Sebîl is a cistern, which is filled during the inundation of the Nile. These fountains are often richlyadorned with marble and bronze railings. They are protected by a very projecting roof, and above them is the more or less handsome school hall. The railings whence the water is distributed are usually approached by several steps. The interior of the Sebîl consists of a single large chamber, the pavement of which is about 3 ft . below the level of the surrounding soil, and in it the water drawn from the cistern is placed in vessels for distribution at the railings. Adjacent to the Sebîls are sometimes placed troughs for watering animals. The water stored in these cisterns is generally in great request in June, when the Nile water becomes unwholesome, assuming a green colour caused by the presence of myriads of microscopically small plants. The Medreseh usually consists of a single hall, with a storeroom for its simple furniture.

Considered with respect to their ground-plans, the mosques are classed in two leading groups: (1) those of rectangular plan, with hypaethral columns or pilasters round the open court (see plan of the
mosques of 'Amr, p. 88, and Barkûk, p. 77); and (2) those which have a rectangular or cruciform court surrounded by closed rooms, like the mosque of Sultan Hasan and most of the tomb mosques, or those where the tomb is of large size compared with the Sahn el-Gâmi'a.

The Tombs of the Muslims (comp. also p. xcix) are generally situated on high ground, uninfluenced by the moisture of the river, and sometimes in the desert. The chambers are destitute of decoration. Within is a catafalque of stone resting on a more or less decorated pedestal, and bearing two upright columns (Shâhid) of marble or other stone, one of which, placed immediately over the head of the deceased, bears his name and age, with texts from the Korân. At the top of the shâhid is represented the turban of the deceased, the form of which indicates his rank. Over the catafalques of persons of distinction are erected dome-shaped canopies, resting on four columns or pilasters, or their tombs have the closed form of those of the shêkhs already mentioned. On festivals the catafalques and.hollow parts of the pedestals are covered with palm-branches, flowers, and basilicum. On these occasions the friends, and especially the female relatives, of the deceased often spend whole days by the tomb, engaged in prayer and almsgiving. For these mourners it was necessary to provide accommodation, and the result is that a complete mausoleum, with its rooms for the family, sebil, school, stables, custodian's residence, etc., is often nearly as extensive as the mosques themselves, while some of them are so large as almost to present the appearance of a small deserted town. To buildings of this kind the name of $H \hat{O} s h$ is applied. One of the most imposing of these is the tomb-mosque of Sultan Barkûk.

The Dwelling-Houses, which rarely have more than two stories, are built in very various styles, but the following rules are generally observed in their construction: - (1) The principal rooms, particularly those of the Harem (p. cci), look into the court or garden, if there be one. (2) The windows looking to the street are small, placed very high, and strongly barred, while those of the upper floors are closed with mushrebîyeh (p.cxcr), which, however, are gradually being superseded by glass-windows with shutters. (3) The entrance-door (Pl. I, 1), behind which is the seat (Mastaba, Pl. I, 2) of the doorkeeper, is generally low and narrow, and the passage (Dirkeh; PI. I, 3) leading from the street to the court is built in the form of an angle, to prevent people from seeing into the court. (4) The court ( $\boldsymbol{H} \hat{s} s h$, Pl. I, 4) is planted with trees and unpaved, and contains a well of water that has filtered through from the Nile. This water, however, is generally more or less brackish, and is used only for washing purposes and for the cattle. (5) By the entrance to the court, and on the same level, is the Mandara (Pl. I, 7), or reception-room of the proprietor, with at least one Khazneh, or cabinet (Pl. I, 15), and other conveniences. The

Mandara of the best class is of symmetrical construction, and the door is in the middle of one of the sides. The central part of this hall, called the Durlốa $a$, which is paved with marble mosaic and contains a fountain (Faskîyeh), is one step lower than the sides on the right and left. The ground-plan is generally the same as that of the Kầa (Pl. 1, 14). Opposite the entrance of the durkấa there is generally a Suffeh, or kind of stand in stone or marble, on which are placed the household utensils for washing, drinking, etc. The more elevated sides of the Mandara, called the Lîwan, are covered with carpets and mats, thus forming a kind of couch, and are never stepped upon except with shoeless feet. Visitors leave their shoes in the Durkấa. Along the walls are often placed cupboards, richly decorated with inlaid work and majolica. The ceilings are generally tastefully ornamented. Adjoining the court there is usually another hall, situated a little above its level, adorned with a column, and open towards the north. This is called the Talchta Bôsh, and is used in temperate weather for the same purposes as the Mandara. Lastly the Mulíad (Pl. 1, 5), where the


1. Entrance of the House. 2. Seat (Mastaba) for the doorkeeper. 3. Corridor (Dirkeh). 4. Court (Hosh). 5. A kind of bower in which visitors are received in summer. 6. Fountain. 7. Mandara. 8. Servants' rooms. 9. Donkeystable. 10. Saddle-room. 11. Room for fodder. 12. Door leading to the women's apartments (Bâb el-Harim). 13. Staircase leading to the Takhta Bôsh. 14. Principal saloon (el-Kấa). 15. Khazneh. 16. Small court. 17. Kitchen. 18. Bakehouse. 19. Privy.
proprietor receives visits in summer, is usually raised, like the Takhta Bôsh, half the height of the groundfloor above the level of the court, and is adorned with several columns, while below it are small chambers used as storerooms and for various other purposes, and frequently the well with its drawing apparatus.

The principal part of the Harem (women's apartments), which in smaller houses is accessible from the court only by the Batb elHarim (Pl. I, 12; II, 3), is the $\underset{\substack{\text { a }}}{ }{ }^{\prime} a(\mathrm{Pl}$. I. 14). The ceiling of the Durkàra is higher than that of the Lîwân, and has a dome in the centre with mushrebîyeh openings. The walls of the Lîwân are


1. Open hall (Takhta Bôsh) or Makrad. 2. Cabinet. 3. Door of the Harem.
2. Rooms of the Harem with mushrebîyehs. 5. Magazine. 6. Open courts.
3. Guest-chambers with Khazneh and privy. 8. Balkony with Mushrebîyeh.
frequently lined with rows of shelves, with valuable porcelain, crystal, or plate. In the larger houses a separate staircase for the women-servants ascends from the groundfloor to the upper stories. On its way it passes the intervening floor forming their dwelling, which is built over the less important rooms of the groundfloor. Another door usually leads direct from the apartments of the proprietor into the harem (Pl. I, 3). At the back of the building are kitchens and stables, and frequently a mill also. - In the country, and even at Cairo, the entrance-door is sometimes painted with very rude flgures of camels, lions, steamboats, etc., which
are intended to indicate that the owner has performed the pilgrimage to Mecca (p. xcii).

## XI. The Arabic Language.

Arabic belongs to the Semitic group of languages, and has no relationship with the tongues of Europe. A knowledge of Hebrew, however, will materially facilitate the learning of Arabic. The golden era of Arabic literature is coeval with the introduction of Lil-Islâm, and the Korân in the dialect of the Kureish (the family of Mohammed) is still regarded as an unrivalled model of style and language. But by the side of this literary Arabic flourished also various colloquial dialects, which were carried by the Arabs into the various provinces conquered for the Crescent, and there developed partly under the influence of the old local tongues. In this way arose the vulgar dialects of Arabic, of which that spoken in Egypt is one. In writing, however, an attempt was made to retain the older forms, and the written language of the present day, known as Middle Arabic, occupies a position midway between the original classical tongue and the popular dialects.

Egypt was conquered by the Arabs in the 19 th year of the Hegira ( 640 A.D.) and the Coptic language was replaced by Arabic. The dialect of the latter developed in the valley of the Nile differs considerably in the pronunciation of the consonants, vocalisation, and aocent from the ordinary Arabic dialects of Syria and elsewhere. Thus the letter $Z$ is pronounced hard in Egypt and soft in Syria (see p. cciv). The variations, however, are not so great as to prevent the Syrians and Egyptians being mutually intelligible.

The pronunciation of the vowels is apparently liable to variation: thus besides the more correct Mimbar the form Mambar is also used; besides Maidân, both Mêdân and Mîdân are heard. A circumflex over a vowel denotes that it is long, and, in the case of a final syllable, that it is to be accentuated. A sharply defined and exact pronunciation of the consonants is characteristic of Arabic and is absolntely essential to any satisfactory use of the language. The learner should endeavour at once to master the pronunciation of the more difficult Arabic consonants, such as $\mathcal{Z}, \stackrel{b}{\mathcal{L}}, \mathcal{\sim}, \boldsymbol{\sim}$, and $(\rho$, so as, for example, to be able to make a distinct difference between bêt (house) and bêd (eggs). Many of the sounds have no representatives in English. - Compare also for pronunciation the alphabet on p. cciv. Owing to the increasing intercourse between the native Egyptians and Europe, the former have of late adopted many words from other languages, chiefly from Italian and French. Many Arabic words have, moreover, long since been replaced by Turkish equivalents. The Egyptian dialect also contains many Coptic or ancient Egyptian words. Very few Europeans learn to pronounce Arabic accurately, even after a residence of many years in the country.

The language of the peasantry and the inhabitants of the desert is purer and more akin to the classical language than that of the dwellers in towns. The Muslims generally speak more correctly than the Christians, being accustomed to a refined diction and pronunciation from their daily repetition of passages of the Korân. The chief difference between the Ianguage of the Korân and the modern colloquiaI dialect is that a number of terminaI inflexions are dropped in the latter.

Alphabet. The Arabic alphabet was developed from that of the Nabatæans, who in turn adopted their written characters from the Palmyrenes. In spite of its external attractions, it is one of the most imperfect in existence. In writtel or printed Arabic the short vowels are usually omitted and have to be supplied by the reader, a feat which demands considerable skill and experience. In the Korân, however, the vowels are all indicated by appropriate signs. It is greatly to be wished that the Arabs would adopt a simpler alphabet, with a regular use of the vowel-signs, and that they would agree to write the ordinary spoken language. The present condition of affairs not only seriously increases a stranger's difficulties in learning the language, but is a serious obstacle to the education of the Arabs themselves.

We give below the sounds corresponding to the different letters, so far as it is possible to represent or describe them to the English reader. It should also be observed that in the following pages we use the vowel sounds of $a, e, i, o, u$ as they are used in Italian (ah, eh, ee, 0,00 ). The $\hat{e}$ used in the Handbook is a contracted form of $e i$, and is used in preference to it, as it exactly represents the ordinary pronunciation (viz. that of $a$ in fate). The original diphthong sound of ei is only used in the reading of the Korân and in a few isolated districts. Where a sound resembling the French $u$ occurs it is represented by $\ddot{u}$ (as in tütün). This system of transliteration will be found most convenient, as the words will then generally resemble the forms used in German, French, and Italian, instead of being distorted to suit the English pronunciation. Thus : emirr, which is pronounced 'aymeer'; shêkh (or sheikh), pronounced 'shake' (with a guttural k); tulûl, prouounced 'toolool'; Abusîr, pronounced 'Abooseer'; etc.

Vowbls. The short vowel symbols, Fathath, Kesrah, and Dummeh ( $\breve{a}, \breve{e}, \breve{u}$ ), which are generally omitted, become long when connected with Alef, Wau, and Ye ( $\hat{a}, \hat{e}, \hat{\imath}, \hat{o}, \hat{u}, a u)$.

The numerous gutturals of Arabic render the language unpleasing to the ear. The consonants Nos. 15, 16, and 21, which are sometimes called 'emphatic', are very peculiar, and modify the vowels connected with them: thus after them $a$ and $u$ approach the sound of $o$, and $i$ that of $e$. The sounds of the French $u$ and $e u$ (German $\ddot{u}$ and $\ddot{0}$ ) are rare in colloquial Arabic.

## Consonants.



Acobntuation. If a word terminates with a long syllable ending in a consonant (indicated by a circumflex accent over the
vowel), or with a syllable ending in a double consonant, the accent is placed on the last syllable (as in maghnâtîs, bâdingân, al'mâz, ketébt, taghtámm, each of which has the stress on the last syllable). If the last syllable has any other form, i.e. if it terminates in a vowel only, or in a consonant preceded by a short vowel, the accent in the case of a dissyllable is on the first syllable (as in gézmeh, búrnus, fürsha, redi), and in the case of a trisyllable or polysyllable on the third syllable from the end (as mármala, máhbara, mâdeneh), except when the penultimate is a long syllable (as in sibânikh), in which case the accent is on that syllable.

Adpress. The inhabitants of towns nse the 2nd person plural in addressing a person, or a periphrasis, snch as genabak (your hononr), hadretak (your presence), or to a patriarch ghubtatkum, to a pasha sa'adetak. $Y a ̈$ sidd ( $O$ sir) is also frequently used, and to Europeans, ya khawágeh.

Possessives. These are expressed by means of affixes. Thus, bintí, my daughter; bintak ( $-i k$ when the person addressed is feminine), thy daughter; bintu, his danghter; bintha, or bintaha, her daughter; bintna or bintina, our daughter; bintkum or bintukum, your (pl. 1) daughter; bintuhum, their danghter. The idea of possession is colloquially expressed by the use of the word beta' ('property'), as el-‘abd beta'i, my slave ('the slave my property').

Article. The definite article el or al is assimilated before dentals, sibilants, and the letters $n$ and $r$ : thns, esh-shems, the snn, etc.

Demonstratives. In Egypt the word 'this' is rendered by de, fem. $d i ;$ as er $-\uparrow \cdot d g i l$ de, this man; el-bint di, this girl. The Bednins nse the old Arabic and Syrian hảda. 'These', dol. 'That', dikha, dukha, dukhauwa, dikhaiya; plural dukhamma.

Relative: elli, omitted after substantives used in a general sense.
Interrogatives. Who, mîn; what, éh, êsh.
Declension. The snbstantive is not declinable. The genitive of a substantive is formed by simply placing it immediately after the snbstantive to be qualified, the latter being deprived of its article: thns, ibn el-bdsha, the son of the pasha. The feminine terminations a, e, iare in snch cases changed into at, et, it: thus mara, wife; marat el-kadi, the wife of the judge.

Doal. The dual termination is ên, fem. etên: thns seneh, year; senetên, two years; rigl, foot; riglên, two feet.

Ploral. In the masculine the termination is in (as fellahin, peasants); in the feminine at (as hara, town, quarter, etc., pl. harat). The plural is, however, nsnally formed by a radical change of the vowel sonnds of the singular, the change being effected in thirty or forty different ways, so that it becomes necessary for the learner to note carefully the plnral form of every substantive: thus, 'ain, spring, pl. 'uyan; tagir, merchant, pl. tuggarr; gebel, mountain, pl. gibâl; kabileh, tribe of Beduins, pl. kabail.

Verbs. Many of the verbs consist of slightly differing cognate roots, connected somewhat in the same manner as the English verbs lay and lie. Each verb consists of a perfect and present imperfect tense, an imperative, a participle, and an infinitive.

The above remarks are made merely in order to afford a slight idea of the structure of the language, the difficulties of which are such that few persons will renture to encounter them, unless they make a prolonged stay in the country. We should, however, recommend the traveller to commit to memory the following words and phrases of everyday occurrence, a knowledge of which will often prove useful.

## Arabic Vocabulary.

one -wâhed, fem. wahdeh; the first -el-âwwel, fem. elauwaleh or el-ula.

| two - etnên, - etnên; |  |  |
| :---: | :---: | :---: |
| ree | - telâteh, | telât; |
| ur | - arbáa, | arba; |
| ve | - khamseh, | lihams; |
| six | - sitteh, | sitt; |
| ven | - sab̌a, | sebt |
| ght | - temânyeh, | temân; |
| ne | tis ${ }^{\text {a }}$, |  |
| ten | - 'ashara, |  |

the second - tâni, fem. tâniyeh
the third - tâlet, - tâlleh
the fourth - râbe, - râb eh
the fifth -khâmis, - khâmseh
the sixth - sâdis, - sâdseh the seventh - sâbé, $\quad$ - sâb eh the eighth - tâmin, - tâmneh the ninth - tâsé, - tâśeh ten -'ashara, - asher;
11 - hadâsher
12 - etnâsher
13 - telatâsher
14 - arbá tâsher
15 - khamstâsher
16 - sittâsher
17 - sab́atâsher
18 - temantâsher
19 - tis'atâsher
20 -'ishrin
30 - telâtı̂n
40 - arba in
50 - khamsin
60 - sittîn
the tenth - 'âshir, - 'âshra
100 - mîyeh; before nouns, mît.
200 - mîtên
300 - tultemîyeh
400 - rub'amîyeh
500 - khumsemîyeh
600 - suttemiyeh
700 - sub amiyeh
800 - tumnemı̂yeh
900 - tus amìyeh
1000 - alf
2000 - alfên
3000 - telat alâf
4000 - arbát alâf
5000 - khamast ălâf
70 - sab ín $\quad 100,000$ - mît alf
80 - temânîn 90 -tis în 1,000,000-milyân

| once | - marra wahdeh, marra <br> ог $n o ̂ b a$ | a half <br> a third | $\begin{aligned} & \text { —nuss } \\ & \text { - tuit } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| twice | - marratên | a fourth | - rub ${ }^{\text {a }}$ |
| thrice | - telât marrât | three fo | $n$ |

four times -arbar marrât
five times - khams (khamas) marrât
six times - sitt (sitteh) marrât
seven times - seb́a marrât
eight times - temân marrât
nine times - tiś a marrât
ten times - 'ashara marrât
The substantives following numerals above ten are used in the singular; thus: 4 piastres, arbac kurûsh; 100 piastres, mît kirsh.

I, ana; thou, inteh, fem. enti; he, hûweh; she, hîyeh; we, ehna; ye or you, entu, or entum; they, hum, or huma.

Yes, eywa; to be sure, náam; no, lâ; no, I will not, lâ, mush 'âuz, or 'âiz; it is not necessary, mush lâzim; not, mấ; there is nothing, mâ fîsh; I will, ana biddi; wilt thou, biddak; we will, biddina; will you, biddulkum.

I go, ana râih; I shall go, âna arûh; we shall go, nerûh ; go, rûh; will you not go, mâ terûh; go ye, rûhu.

See, shûf; I have seen, shuft.
I speak, betkallim; I do not speak Arabic, ana mâ betkallimshi bil-'arabi; what is your name, ismak $\hat{e}$.

I drink, bashrab; I have drunk, ana shiribt; drink, ishrab.
I eat, ana bâkul, or ana wâkil; I have eaten, ana kalt; eat, kul; we will eat, biddina nâkul.

He sleeps, binâm; he is now asleep, huweh nâim ; get up, ḳ̂̀mu; I am resting, besterih or bastaraiyah.

I have ridden, rikibt ; I mount, barkab; I will mount, arkab; I start, ana besâfir, or musâfir.

I am coming, ana gâi ; come, ta'âleh, táâla, or tââl.
To-day, en-nahâr-deh; to-morrow, bukra; the day after to-morrow, ba'deh bukra; yesterday, embôreh; the day before yesterday, auwel embâreh.

Much or very, ketîr ; a little, shuwaiyeh (shwaiyeh); good, tayyib; not good, mush tayyib ; very good, tayyib ketir; slow, slower, shwaiyeh shwaiyeh, 'ala mahlak; go on, yallah, yallah.

How much, kâm; for how much, bikâm; enough, bess; how many hours, kam sấa.

For what purpose, min-shân-êh or 'ala-shân-êh; no matter, mâ 'alêsh. This last is a favourite expression with the Arabs, who use it to express indifference and also as an apologetic interjection.

Everything, kull; together, sawa, sawa; every, kull wahed; one after the other, wâhed, wâhed.

Here, heneh (Syrian hôn); come here, tarâla heneh; come from here, ta'âleh min heneh; there, henâk (Syrian hônîk); above, fôk; below, taht; over, 'ala; deep, ghamik, ghawît; far, ba'̂̀d; near, leuraiŷ̂b ; inside, guwwa; outside, barra; where, fên (pronounced by the Beduins wên); yet, lissa; not yet, mâ lissa (with a verb); when, emta; after, ba'd; later, afterwards, badên; never, abadan; always, dâiman tamallı̂; perhaps, belki, yumkin, or yimkin.

Old, kebîr, 'atîlk kadîm; deceitful, khâin; intoxicated, sakrân; blind, arma; stupid, awkward, ghashîm; lazy, keslân; strange, gharîb; healthy, salîm, şâgh salîm, tayyib, bis-sahha, or mabsût (also 'contented'); hungry, gitân; small, sughayyar; short, kusayyar; long, tawîl ; untruthful, kaddâb; tired, tábân; satisfied, shab'ân; weak, $d a^{\wedge} \hat{\imath} f$; dead, meyyit; mad, magnûn (Syrian mejnûn); trustworthy, amin.

Bitter, murr ; sour, hâmed; sweet, helu.
Broad, ‘arı̀d; narrow, dayyile ; large, 'azîm, kebîr; hot (weather), harr, (of food, etc.) sukhn; high, 'âli; empty, khâli, fâdi; new, gedîd; low, wâti ; bad, battâl; dirty, wusekh; dear, ghâli.

White, abyad; blaok, dark, iswid; red, ahmar ; yellow, asfar; blue, azrak; green, akhdar.

Hour, số $a$; what o'clock is it, es-sấa kâm; it is 3 o'clock, es-
$s \hat{a}^{〔} a$ telâteh; it is half past 4, es-s $\hat{a} f a r b a^{c}$ unusss; it is a quarter to 5 , es-sấa khamseh illa rub‘a.

Forenoon, dahâ; noon, $d u h r$; afternoon ( $21 / 2$ hours before sunset), ‘asr ; night, lêl; midnight, nuṣs-el-lêl.

Sunday, yôm el-had, nehâr el-ḥad; Monday, yôm el-etnên; Tuesday, yôm et-telât; Wednesday, yôm el-arbar; Thursday, yôm el-khamîs; Friday, yôm el-gumia; Saturday, or Sabbath, yôm es-sebt. Yôm or yum (day) is generally omitted. Week, gum'a; month, shahr, pl. ushhur.

Instead of the Arabic names of the months used in Syria, the Egyptians employ the Coptic (ancient Egyptian) names of the solar months, which, however, are always about nine days behind the European months. Each Coptic month has thirty days, and in order to complete the year five or six intercalary days are added at the end (in the beginning of September). The European names, however, are gradually coming into general use.

| English | January | February | March | April | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Syrian | $k a n a n$ et-tani | shobat | $\alpha d a{ }^{\circ}$ | $n i$ san | $e y d r$ | hazîran |
| European | yenaîr | febrait. | mares | $a b r * 2 l$ | mayeh | yania |
| Coptic | $t a b a$ | $a m s h \hat{r}{ }^{\text {r }}$ | baramhat | barmudeh | bashens | banna |
| English | July | August | September | October | November | December |
| Syrian | tamaz | $a b$ | êlal | tishrin el-awwel | tishrin et-tâni | kanan el-awowel |
| European | $\left\|\begin{array}{c} \text { yalia } \\ (\text { laliyeh }) \end{array}\right\|$ | aghostos | sebtember | oktôbe.* | november | dezember |
| Coptic | $e b \hat{\imath} b$ | misra | tat | $b a b a$ | hatar. | kiahk |

The intercalary days (which come after Misra) are called ayyâm en-nesi.
The Muslim months form a lunar year only (comp. pp. xcii, xciii). Their names are: Moharrem, Safar, Rab̂̂ el-Awwel, Rab َ̂ et-Tâni, Gemâdel-Awwel, Gemadet-Tâni, Regeb, Shábân, Ramaḍ̂an (month of fasting), Shawwâl, Dhil-Ki'de, Dhil-Higgeh (month of the pilgrimage).

Winter, shita; summer, sêf; spring, rabî'; autumn, kharîf; rain, matar; snow, telg; air, hawa.

Heaven, sema; moon, kamar; new moon, hilâl; full moon, bedr; sun, shems; sunrise, ṭul̂र्थ esh-shems; sunset, maghreb; star, nigm, pl. nugum; constellation, kaukab.

East, sherk; west, gharb; south, kibla; southern, kibli, kubli; north, shemâl.

Father, $a b$, or, before genitives and affixes, $a b \hat{u}$; mother, $u m m$; son, ibn, or weled, pl. alâad; daughter, bint, pl. benât; grand-
mother, gidda, or sitt; brother, akh, before genitives and affixes alkh, pl. ikhwân; sister, ukht, pl. ukhwât; parents, ab u umm, or wâlidêm; woman, mara, hurmeh; women, harîm, niswân; boy, weled; youth, fellow, gadac, pl. gid'ân; man, râgel, pl. rigâle; person, insân, pl. nâs, or beni âdam (sons of Adam); friend, hab̂̂b, sâ̂heb, pl. aṣhâb; neighbour, gâr, pl. gîrân; bride, ‘arûs; bridegroom, 'arîs; wedding, 'urs.

Cord for fastening the kuffîyeh, 'olôal ; cloak, 'abâyeh; fez, larbûsh; felt cap, libdeh; girdle, hezâm; leathern girdle, kamar; trousers (wide), shirwal; trousers (of women), shintyân; European trousers, bantalân; long white blouse, galabîyeh; jacket, waistcoat, salta, 'anteri; dressing-gown, kuftân; coat(European), sitra; skullcap, taluîyeh; silk, harîr; boot, gezma; slipper, babûg; shoe, mar$k u ̂ b, s a r m a$; wooden shoe, $k a b \nmid \hat{a} b$; stocking, shurâb; turban, 'emma.

Eye, 'ên, dual 'ênên; beard, dalon, lehyeh; foot, rigl, dual riglên; hair, sha'r; hand, yedd, îd, dual $\hat{\imath} d e ̂ n ; ~ m y ~ h a n d s, ~ \hat{\imath ̃ d e y y e h ; ~}$ right hand, yemîn; left hand, shemâl; palm of the hand, keff ; fist, k.abda; head, râs; mouth, fumm; moustache, sheneb.

ذiarrhœa, ishâl; fever, sukhûna; homma; China, kîna; quinine, melh el-kîna; opium, afiyân; pain, wag'a.

Abraham, Ibrâhîm; Gabriel, Gabriân, Gebrâll, Gubrân; George, Girgis; Jesus, Seyyidna 'Isa (the Mohammedan name), Yesûc el-Mesîh (used by the Christians); John, Hanna; Joseph, Yûsuf, Yûsef; Mary, Maryam; Moses, Mûsa; Solomon, Selîmân, Islêmân.

American, Amerikâni, Malelî̂ni; Arabian, ‘arabi; Arabs (nomads), 'Arab; Austria, Bilâd Nemsa; Austrian, Nemsâwi; Beduin, Bedawi, pl. Bedwân, 'Arab, 'Orbân; Cairo, Maṣr, Medînet Maṣr; Constantinople, Istambûl; Egypt, Bilâd Masr ; Egyptians (non-nomadic Arabs), Ullâd 'Arab; England, Bilâd el-Ingilîz; English, Ingilîzi; France, Feransa; Frank (i.e. European), Ferangi, Afranki, pl. Afrank; French, Feransâwi; Germany, Alemânia; German, Alemâni; Greece, Rûm; Greek, Rûmi; Italy, Bilâd Itâlia; Russia, Bilâd el-Moskof; Russian, Moskûwi, Moskufi; Switzerland, Switzera; Syria, Esh-Shâm; Turkish, Turki.

Saint(Mohammedan), wali, weli; St. George (Christian), Girgis el-kaddîs, mârGirgis; prophet, nebi, or (applied to Mohammed) rasûl.

Army, 'askar; baker, khabbâz, farrân; barber, hallâk, mozeyyin; Beduin chief, shêkh el-'Arab; bookseller, kutbi; butcher, gezzâr; caller to prayer, mueddin (p. xci); consul, konsul; consul's servant (gensdarme), kawwâs; cook, tabbâkh; custom-house officer, gumruktshi; doctor, hakîm, plur. hukama; dragoman, turgemân (p.xxi); gatekeeper, $b a w w a ̂ b$; goldsmith, sâigh ; judge, kâdi; money-changer, sarraf; pilgrim (to Mecca), hagg (Syrian hajjii), plur. hegâg; police, zabtîyeh; porter, hammâl, sheyyâl ; robber, harâmi, pl. harâmîyeh; scholar, `âlem, pl. ‘ulama; schoolmaster, flicìh; servant, lkhaddâm; soldier, ‘askari; tailor, kheyyât ; teacher, mo`allim; village-chief, shêkh el-beled; washer, ghassâl; watchman, ghafîr, pl. ghufara.

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Apricot, mishmish; banana, môz; beans (garden), fûl, (lupins) lûbiyeh; citrons or lemons, lîmûn; cotton, kotn; dates, balâh ; datepalm, nakhleh; figs, tîn; flower (blossom), zahr, plur. azhâr; garlic, tám; grapes, 'ŭnab, 'enab; melons (water), battîkh, (yellow) kâwûn, shamâm; olives, zêtûn; onions, basal; orranges, bortultân ; peach, lehôkh (Syrian dorrâk); pistachios, fustuk; plums, berkûk (Syrian khûkh) ; pomegranate, rummân; St. John's tree (carob), kharrûb; tree (shrub), shagara, plur. ashgâr.

Brandy, 'araki; bread, 'êsh (Syrian khubz); loaf, raghîf, pl. aghrifeh; cigarette-paper, warakat sigâra: coffee, kahwa; egg, bêd, (boiled) bêd maslûll, (baked) bêd mallit; honey, 'asal; milk, leben, (fresh) lebén halı̂̀b, (sour) leben hâmed ; oil, zêt ; pepper, filfll; poison, simm; rice, ruz; salt, melh; sugar, sukkar; water, moyêh; wine, nebîd.

Book, kitâb, plur. kutub; letter, gewâb, maktûb.
Carpet, siggâ̂da, busât ; chair (stool), kursi, plur. kerâsi; gate, $b a ̂ b, b a w w a ̂ b a$; hospital, isbitâlia; house, bêt, plur. biyût ; minaret, mâdana; monastery, dêr, (of dervishes) telî̀yeh; mosque, gâmit (or more rarely mesgid); prayer-niche, mahrâb ; pulpit, mambar, mimbar; room, ôḍa; sofa, dîwân; straw-mat, hasîra; table, sufra; tent, khêma, plur. khiyam, (Beduins') 'eshsha, bêt'; tent-peg, watad, plur. autâd; tent-pole, 'amûd; tomb, kabr, plur. leubûr; window, shibbâk, plur. shebakîk, or tâlka.

Bridle, ligâm; candle, sham'a; dagger, khangar; glass (for drinking), ḷubâyeh; gun, bunduḳ̂yeh; gunpowder, bârûd; knife, sikkîneh; lantern, fânûs; luggage, 'afsh; pistol, tabanga, ferd; rope, habl; saddle, serg; saddle-bag, khurg; stick, 'asâyeh; stirrup, rikâb, plur. rikâbât ; sword, sêf.

Bath (warm), hammâm; cistern, bîr sahrîg; fountain (public), sebîl'; pond, birkeh, plur. birak; spring, 'ain, 'ên.

Charcoal, coal, fahm; fire, nâr; iron, hadîd; lead, rusâṣ ; light, $n \hat{r}$; stone, hagar; timber, khashab; wood for burning, hatab.

Anchorage, mersa; harbour, mina; island, gezireh; land, mainland, barr; Nile, bahr en-Nill, bahr; Nile-barge, dahabîyeh; promontory, râs; river, nahr; sea, bahr; ship, merkeb, markab, plur. marâkib; steamboat, wabûr; swamp, batîha, ghadîr.

Bridge, leantara; castle, fortress, lcal'a; cavern, maghâra; desert, hala, gebel; district, native country, bilâd; earth, ard; embankment, gisr ; hill, tell, plur. tulûl; market, sûlk, plur. aswâlk; markettown, bandar; meadow, merg $\dagger$; mountain, gebel, plur. gibâl; palace, lkasr, serâyeh; plain, sahl, (low ground) wata; road, tarîk, darb, sikkeh, (main road, high road) tarịk sultâni, (by-road) hâara, darb, sikkeh; ruin, kharaba, birbeh; school, (reading) kuttâb, (more advanced) medreseh, plur. madâris; street, (main) shâric, (lane) zukâk; thicket, ghêt; town (large), medîneh, plur. medâin; valley, wàdi ; wood, ghâba; village, beled, kafr.

[^21]Ass, homâr, plur. hamîr; bee, nahla; bird, têr, plur. tiyûr, (small) 'aṣf $\hat{\text { a }}$, plur. 'asâfîr ; boar (wild), hallûf; bug, balkka ; camel, gemel, plur. gimâl, fem. nâka; camel for riding, hegîn; fowl, farkha, plur. ferâkh (used in Upper Egypt for 'young pigeons'); cock, dîk; dog, kelb, plur. kilâb; dove, hamâmeh; duck, batt; eagle, nisr ; fish, semaka, plur. semak ; fleas, berâghît ; fly, dubbâna; foal, muhr; gazelle, ghazâl; hedgehog, kumfud; hen, farruga (Syrian jejjeh); horse, hosân, plur. khêl; leech, 'alalka, plur. 'alalk; lizard, sehlîyeh; louse, ẹamleh; mare, faras; pig, khanzîr; pony, kedîsh; scorpion, 'akeraba, plur. 'akârib; sheep, kharûf, fem. na'ga; snake, ta'ban, hayyeh; stallion, fahl, hosần; tortoise, zihlifeh; turtle, tirsa; vulture, rakham.

On Arrival. For how much will you take me ashore? (to the ship?) Tetalla'ni fl-barr bikâm? Tenezzilni fl-menkeb bikâm?

For flve francs, Bikhamas ferankât; bikhamseh ferank.
Too much; I will give you one. Ketîr, ådîk wâhed, bess.
You shall take me alone; or I will give you nothing. Tâkhudni (or tewaddîni) wahdi, willa mâ ba'dîkshi hâgeh.

There are three of us. Ehna telâteh.
Four piastres each. Kullu wâhed bi arbac lourûsh.
Put this box (these boxes) into the boat. Nezzil eş-sandûk-deh (ess-sanadîk-dôl) fil felûke.

Аt тhe Custom-House (Gumruk). Open this box. Iftah egsandûk.

I have nothing in it. Mâ fîsh hâgeh, mâ fihâsh hâgeh.
Give me your passport. Hât ei-tezkereh (bassâbôrto).
Here is my passport. Aho el-bassâbôrto betấi.
I have no passport. Mâ ‘andîsh tezkereh.
I am under the protection of the English (American) consul. Ana fi hemâyet (or âna tahte) konṣ̂l el-Ingilîzi (el-Amerikâni).

At a Cafe (p. xxiii). Boy, bring me a cup of coffee. Hât fingân kahwa, ya weled (kahwa bisukkar, with sugar ; minghêr sukkar, or sâde, without sugar).

Bring me a chair. Hât loursi. Bring me water. Hât li môyeh.
Bring me a water-pipe. Hât shîsheh (nargilleh).
Bring me a live coal. Hât wil'a (basṣat nâr, basṣa).
Change the pipe (i.e. bring a newly flled bowl). Gheyyar en-nefes.

Ат the Bath (p. xivii). Fil Hammâm. Bring the wooden shoes. Hât el-kabkâb. - Take me in. Waddini gûwwa. - Leave me for an little. Khallîni shwaiyeh. - I do not perspire yet. Mânîsh 'arkân lissa. - Rub me well. Keyyisni tayyib (melîh). - It is not necessary to rub me. Mûsh lâzim tekeyyisni. - Wash me with soap.

Ghassilni bisâbûn. - Enough; it is sufflcient. Bess; yikeffi; bikeffi. - Bring me cold water. Hất môyeh bârideh. - Bring some more. Hát laamân. - We will go out. Nitllá barra. - Bring me a sheet (sheets). Hât fûta (fuwaṭ). - Bring me water, coffee, a nargîleh. Hât mốyeh, lahwa, nargîleh. - Where are my clothes? Fên hudâmi; hudûmi fên? - Bring my boots. Hât el-gezmeh. - Here is your fee. Khud baḷshîshak; âdi el-baḷshîsh betấak.

Washing. Take the clothes to be washed. Waddi el-hudûm lil-ghasîl. (The articles should be counted in the presence of the washerman.) - How much does the washing cost? Kâm (káddi $\hat{e}$ ) temen el-ghasîl?

On the Journiy. When will you start? Emta tesâferu? We will start to-morrow at sunrise. Nesafer bukra, ma'ash shems; an hour before sunrise, st'a leabl esh-shems; two hours after suurise, sấetṫn ba'd esh-shems. - Do not come too late. Mâ tit'alchlcharsheh. - Is everything ready? Kull shê hâder? - Pack; load (the camel). Sheyyilu; sheddu. - Hold the stirrup. Imsik er-rikâb. - Wait a little. Istanna (istenna) shwaiyeh.

What is the name of this village, mountain, valley, tree, spring? $E$ (or êsh) ism el-beled de; or el-beled-de ismo ê (el-gebel, wâdi, shegara, 'ên)?

We will rest, breakfast. Nestereyyah (nisterîh), niftar. - Is there good water there (on the way)? Fî môyeh tayyiba (fiddarb)? - Where is the spring? Fên el-'ên? - Keep at a little distance. Khallîk baîd 'anni. - Bring the dinner. Hầt el-akl, eṭtabîlkh, elghada. - Take away the dinner. Shîl el-akl.

Stop. Uleaf, 'andak. - Go on. Yalla. - Where are you going to? Enta râih fên? - Where do you come from? Gâi min ên?

Shall we go straight on? Nerûh dughri? - Straight on. Dughri, dughri. - Turn to the left. Hawwud ‘ala shmâlak.

Do not be afraid of me. Mâ tlchafsh minni. - What am I to do? Weana mâ lı? - I will have nothing to do with it ; it does not concern me. Anamâl $l \hat{\imath}$. - What are we to do? Esh el-'amal ; na'mel ê?

0 sir, a gift. Bakshîsh, yâ khawâgeh! - There is nothing for you; be off. Mâfîsh; rûh!

Open the door. Iftah el-bâb. - Shut the door. Ikfil el-bâb. Sweep out the room, and sprinkle it. Iknus (iknis) el-ôdeh u rushshaha.

We will eat. 'Auzîn nâkul. - Cook me a fowl. Itbukhli farllua. - Clean this glass well. Naddef tayyib el-leubaiyeh-di. - Give me some water to drink. Iskîni, idîni moiyeh.

At a Shop (see p. 44). What do you want? What are you seeking? 'Auz ê? 'Aiz ê? - What may it cost? Bilầm deh? Deh bikam? - What does ${ }_{\mathrm{j}}^{〔}$ this cost (what is it worth)? Ryiswa lıâm?
-That is dear, very dear. Deh ghâli, ghâli ketîr. - Cheap, sir. Rakhis, yâ sîdi. - No, it won't do. Lâ, mâ yisahhish. - Yield a little. Zîd shwaiyeh. - Give the money. Hât el-flûs. - Change me a piece of gold. Isrif li-gineh. - For how much will you take the gold piece? Takkhod el-gineh bikâm?

Salutations and Phrases. Health (peace) be with you. Essalâm 'alêkum. Answer: And with you be peace and God's mercy and blessing. U'alêkum es-salâm warahmet Allâh wa barakâtu. These greetings are used by Muslims to each other. A Muslimgreets a Christian with - Thy day be happy. Nehârak saîd. Answer: Thy day be happy, blessed. Nehârak saîda wemubârak (umbârak).

Good morning. Sabâhkum bil-khêr, or sabâh el-khêr. Answer: God grant you a good morning. Allâh iṣabbehkum bil-khêr.

Good evening. Misâkum bil-khêr, or mesîkum bil-khêr. Answer: God vouchsafe you a good evening. Allâh yimessîkum bil-khêr; or messâkum Allâh bil-khêr. - May thy night be happy. Lêltak sä'îdeh. Answer: Lêltak saîdeh we mubâraka.

On visiting or meeting a person, the first question after the usual salutations is: How is your health? Ezeiyak, or kêf hâlak (kêf lkêfak)? Thanks are first expressed for the enquiry: God bless thee; God preserve thee. Allâh yibârek fîk; Allâh yihfazak. Then follows the answer: Well, thank. God. El-hamdu lillâh, tayyib. - The Beduins and peasants sometimes ask the same question a dozen times.

After a person has drunk, it is usual for his friends to raise their hands to their heads and say: May it agree with you, sir. Hanîian, yâ sîdi. Answer: God grant it may agree with thee. Allâh yehannîl.

On handing anything to a person: Takeit. Khud (Syrian dûnak). Answer: God increase your goods. Kattar Allâh khêrak, or kettar khêrak. Reply : And thy goods also. Ukhêrak. (This form of expressing thanks, however, will not often be heard by the ordinary traveller, as the natives are too apt to regard gifts presented to them by Europeans as their right.)

On leaving: Good bye. 'Al Allâh. Or : To God's protection. Fî amân Illâh. Or: Now let us go on. Jalla bina. - The person leaving usually says nothing, unless when about to start on a long journey, in which case he says: Peace be with you. Maras-salâma.

On the route: Welcome. Ahlan wasallan, or marhaba. Answer: Twice welcome. Marhabtên.

I beg you (to enter, to eat, to take something). Tafaddal (tefaddal, itfadḍal); fem tafadḍâli (itfadḍáli); plur. tafaḍ̣álu (itfaḍḍálu, tefaddálu). - Will you not join us (in eating)? Bismillah (literally 'in God's name'). Answer : May it agree with you, Bilhána.

Take care ; beware. Û́ka ( $\hat{u}$ 'a); fem. $\hat{u k i}(\hat{u} \hat{\imath})$.

I am under your protection ; save me. Fardak (ficardak). - My house is thy house. Bêtî bêtak (p. 45) - Be so good. E'mel ma'ruf.

What God pleases ('happens', understood). Mashallah (an exclamation of surprise). - As God pleases. Inshallah. - By God. Wallâh, or wallâhi. - By thy head. Wahyât râsak. - By the life of the prophet. Wahyât en-nebi. - God forbid. Istaghfir Allâh!

## XII. Works on Egypt.

The traveller who desires more than a mere superficial acquaintance with the land of the Pharaohs, the history of which is the most ancient and in some respects the most interesting in the world, should of course before leaving home read some of the standard works on the subject, and also select a number of others for reference or entertainment during the journey. This is all the more necessary if the traveller is entirely ignorant of the ancient and modern languages of the country, in which case he will find it difficult, if not impossible, to institute independent enquiries as to its manners, literature, and art. From the appended list, which might easily be extended, the traveller may make a selection in accordance with his individual taste. Those indicated by asterisks are among the most indispensable.

A very complete bihliography of Egypt will be found in Prince Ibrahim Hilmy's Literature of Egypt and the Soudan from the earliest times to the year 1885 inclusive; 2 vols. fol., London, 1886-87. Among the leading foreign authorities on Egypt are Lepsius's 'Denkmäler aus Fgypten und Athiopien', Champollion's 'Monuments de l'Égypte et de la Nubie', Rosellini's 'Monumenti dell' Egitto e della Nubia', and the 'Description de l'Egypte' published by the members of the French expedition.

With regard to the Greek and Roman writers on Egypt, see p. 135. The Arabian historians are mere chroniclers, who narrate a series of facts and traditions, and are entirely deficient in method and the faculty of crificism. The following are the most important writers on the general history of Egypt: - El-Mas'adi (d. 956), of Fostât; Ibn el-Athir (d. 1232), of Mossul in Syria; Ibn Khaldan (d. 1406), one of tbe most learned of Arabian authors, a philosophical historian, and chiefly famons for the preface to his history, which was printed at Bûlâk, in four volumes, in 1868; Abulfidâ (d. 1331), prince of Hama in Syria. The following are authors of important works on limited epochs of Egyptian history and of valuahle descriptive works: - El-Makrizi (d. 1442, at Cairo), the author of a geographical, physical, historical, and political description of Egypt, and of Cairo in particular, printed at Bûlâk in 1854; Abul-Mahdsin (d. 1469), the author of a detailed history of Egypt from the Arabian conquest nearly down to the time of his death; Es-Siyuti (d. 1506), of Siût in Upper Egypt; El-Manaf (d. 1624); Abu Shama (d. 1224), who wrote the history of Nuteddîn and Şalâheddîn ; Bahdeddîn (d. 1234), who for many years was a follower of SAladin; ‘Abdellatîf (d. 1232), a physician at Baghdâd, the author of a very important and interesting description of Egypt.

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Classical scholars visiting Egypt should provide themselves with the 2nd book of Herodotus, the 171 h book of Strabo, and the 1 st book of Diodorus Siculus (comp. p. 137).

Additional books on Upper Egypt are mentioned in Baedeker's Upper Egypt.

## 1. Approaches to Egypt.

The time-tables and handbooks of the various steamship companies (see below) give full information both as to the direct sea-routes from England and as to the steamers from Mediterranean ports. Particulars of the overland rontes (see p. 2) from England to the Mediterranean will be found in Bradshaw's Continental Railway Guide (2s.). the advertisement pages of which also contain some shipping information. The P. \& 0 . Co. issues tickets for the sea-route out and the overland route home, or vice versa. Heavy baggage should in all cases, if possible, be sent round by steamer. - Travellers from the United States may sail direct from New York to Naples or Genoa by German steamer, and proceed thence hy one of the steamers mentioned at pp. 2, 3.

Travellers who desire to return from Egypt by one of the larger mail lines should secure a berth as soon as possible by applying to the shipping offices in Cairo (p. 29), as these steamers are apt to be crowded from February to April inclusive. The days and hours given below for the arrival and sailing of the steamers are approximate only, except in the case of the terminal ports. At intermediate ports the steamers are sometimes behind itinerary time, and not unfrequently a day or two in advance. In either case they proceed at once on their voyage. - One of the best routes for returning is that viâ Naples (p. 2), as the temperatnre of Naples and Rome forms a pleasant intermediary between the warmth of Egypt and the colder climate of N. Europe. A similar remark applies to Pegli, Nervi, and other places on the Riviera conveniently reached from Genoa (p. 3).

Alexandria is almost $30^{\circ} \mathrm{E}$. of Greenwich, and its time is 1 hr .59 min. in advance of Greenwich time; that of Cairo is 2 hrs . 5 min . and that of Port $\mathrm{Sa}^{\text {rid }} 2 \mathrm{hrs} .10 \mathrm{~min}$. in advance of Greenwich. 'Central Europe' time (observed on German and Italian railways, etc.) is $1 \mathbf{h r}$. in advance of Greenwich.

Alexandria, the chief seaport of Egypt, is regularly visited by British, French, Austrian, Italian, Russian, Greek, and Egyptian steamers. Port Sa'̂̂d and Isma'̂̂lîya, on the Suez Canal, are touched at by the vessels of the great Australian, Asiatic, and East African lines. - Cairo may be reached by rail in $31 / 2 \mathrm{hrs}$. from Alexandria or Isma'îlîya, and in $91 / 2 \mathrm{hrs}$. from Port Sa'îd. The railway from Port Sarîd is a narrow-gauge line as far as Ismarillîya, where carriages must be changed (p. 211 ; 1 hour's halt), so that it saves trouble to remain on board the steamer as far as Isma'îlîya, especially as through-tickets to Cairo by this route are issued in Europe (comp. p. 2).

## a. Steamers from England direct.

1. Steamers of the Peningular and Oriental Steam Natiaation Co. ('P. \& O') leaving London (Royal Albert Docks) every Thurs. or Frid., sail viâ Gibraltar, Malta, and Brindisi (see p. 2) in 12-13 days to Port Sarîd and Isma'îlîya (fares 1st. cl. 20l., 2nd cl. 12l.; return-tickets $32 l ., 18 l$.), whence a special train is run to Cairo on the arrival of the steamer. - Steamers of this company
also, leaving London every fortnight, sail vià Gibraltar and (9 days) Naples to Port Said and Ismailiya. Passengers for Alexandria (same fares as to Isma'iliìya) change stea mers at Naples (see below). - Return-tickets are available for four months.
2. Steamers of the Orient and Pacific Co. ('Orient Line'), leaving London (Tilbury Docks) every alternate Frid., sail viâ Gibraltar and ( 9 days) Naples to Port Sa'îd and Isma'iliya (fares $20 l$., 12l.; return-tickets 32l., 18l.). Return-tickets are available for four months.
3. Steamers of the North Grrman Lloyd ('NorddeutscherLloyd'), for Australia or China, leaving Southampton fortnightly, sail vià Genoa and Naples to Port Sa'id and Ismailiiya (fares from London, $20 l .6 \mathrm{~s} ., 12 \mathrm{l}$. $6 \mathrm{~s} . ;$ return-tickets $32 l .11 \mathrm{~s}$., 19 l . 10s.). Thence to Cairo by rail (fares from London, 21l., 12l. 13s. 6 d. ; return-tickets $34 l$., 20 l . 5 s .). Return-tickets are available for six months.
4. Steamers of the Papayanni, Moss, Anchor, Ocean, and Leyland Lines sail from Liverpool to Alexandria at irregular intervals (fare about 15l.).

## b. Steamers from Mediterranean Ports.

Overland Routes from London to Mediterranean Ports. Brindisi may be reached from London viâ Bâle in 59 hrs . by ordinary train (fare 12l. 6 s .6 d . or 8 l .18 s .6 d .) ; or in 48 hrs . by the 'P. \& O. Brindisi Express', leaving London every Frid. evening (fare, including sleeping-car ticket, $16 l .14 s .3 d$. ; tickets obtainable only from the P. \& 0. Co., 122 Leadenhall St., E. C., or the International Sleeping Car Co., 14 Cockspur St., S.W.). - Genoa is $301 / 4 \mathrm{hrs}$. from London viâ Paris and Mont Cenis (fares 72. 9s. $3 d ., 5 l .4 s .6 d$.). - Venice is 42 hrs. from London viâ Bâle and the St. Gotthard (fares $8 l .15 s$. $0 d ., 6 l .8 s .0 d$.). - Naples is 50 hrs . from London viâ Paris, Mont Cenis, and Rome (fares 11l. 4s. 5d., 7l. 17s. 2d.). - Marseilles is 25 hrs . from London (fares 6l. 18s. 0 d ., $4 l$. 1 (fs. 0 d .). A Mediterranean Express' leaves Paris for Marseilles, etc., three times a week in winter, once a week in summer; passengers from London by this train pay $4 l .08 .1 d$. in addition to the ordinary 1 st class fare.

The chief lines of Steamers to Alexandria are: -

1. From Brindisi (Grand Hôtel des Indes Orientales, first class). Austrian Lloyd steamer (Trieste boat, see p. 3) every Sat. at midnight, reaching Alexandria on Wed. at $5.30 \mathrm{a} . \mathrm{m}$. (fares 1st cl. 88 florins in gold, 2 nd cl. 59 fl .); returning from Alexandria every Tues. at 9 a.m., reaching Brindisi on Frid. evening. - Navigazione Generale Italiana (Venice boat, see p.3) every alternate Frid. morning, reaching Alexandria on Mon. morning (fares 180 fr . 60, 113 fr . 60 c., including wine); returning from Alexandria every alternate Thurs. morning, reaching Brindisi on Sun. morning.
2. From Naples (Hôtel Bristol, West End, Grand Hôtel, all of the first class; Riviera, 8-10 fr.), P. \&O. steamer every alternate Sun. at 4 p.m. (in connection with mail-steamer from London, see above), reaching Alexandria on Thurs. morning (fares 10l., 6l.); returning from Alexandria every alternate Sat. at 3 p.m., reaching Naples on Wed. morning. - Navigazione Generale Italiana (Genoa boat, see $\mathbf{p}$. 3), every Wed. evening, reaching Alexandria on Sun.
morning (fares 222 fr., 164 fr.); returning from Alexandria every Wed. afternoon, reaching Naples on Sun. morning.
3. From Vbnice (Hôtel Europa, Royal Danieli, Grand Hôtel, all of the first class, with corresponding charges; Britannia, well managed; Italia; Luna; Città di Monaco, etc.). Navigazione Generale Italiana, every alternate Tues. morning, viâ Ancona, Bari, and Brindisi (arriving Thurs. afternoon, see p. 2), reaching Alexandria on Mon. morning (fares $251 \mathrm{fr} .10,164 \mathrm{fr} .10 \mathrm{c}$.); returning from Alexandria every alternate Thurs. morning, reaching Venice on Wed. morning.
4. From Grnoa (Grand Hôtel Isotta, de Gênes, du Parc, all first class; de la Ville; des Etrangers, etc.). Navigazione Generale Italiana, every Sat. (every fourth voyage on Mon.), viâ Leghorn (except every fourth voyage), Naples (see p. 2), and Messina, reaching Alexandria on the second Sun. following (fare 1st cl. 8l. 14s., food $6 s .6 d$. or $9 s .6 d$. per day extra, according to steamer); retnrning from Alexandria on Wed., reaching Genoa the following Wednesday. - Twice a month these steamers go on to Port Sa'îd.
5. From Marseilles (Hôtel Noailles, de Marseille, du Louvre et de la Paix, all of the first class; Petit Louvre; Colonies). Steamers of the Messageries Maritimes leave Marseilles every alternate Sun. at 4 p.m., reaching Alexandria on Thurs. (fares, by Mediterranean packet on Sat., 300 fr ., 210 fr . ; by India and China packet on Sun., 350 fr ., 260 fr .); returning from Alexandria on Sun., reaching Marseilles on Thursday. Return-tickets, available for four months, at a reduction of 10 per cent. - The India and China packets (fortnightly) call also at Port Sa'îd and Isma'îlîya.
6. From Triestr (Hôtel de la Ville, Delorme, both near the quay; Europa, near the station): Austrian Lloyd steamers leave Trieste every Frid. at 1 p.m., touching at Brindisi (see p. 2; arriving at 9 p.m. on Sat.), and reach Alexandria on Wed. afternoon (fares $120 \mathrm{fl} ., 80 \mathrm{fl}$. in gold); returning from Alexandria on Tues. at 9 a.m., reaching Trieste on Sat. afternoon. - Another steamer of the same company sails every fourth week by the longer route viâ Fiume and Corfù to Alexandria.
7. From Constantinople : Russian Steamers sail every Thurs. afternoon viâ Smyrna to Alexandria, in $4-5$ days. - Khedivieh Mail Steamers (managed by Thos. Cook \& Son. Ltd.) start every Wed. afternoon for Alexandria viâ Smyrna and ( 40 hrs .) the Piraeus (Athens); returning on Wed. afternoon.

Arrifal at Alixandria (comp. Map, p. 20). The perfectly flat N.E. coast of Egypt, and even Alexandria itself, are not visible to the steamboat passenger until very shortly before the vessel enters the harbour. We first observe the lighthouse rising conspicuously above the level and colourless line of the coast. Before passing Bâb el-Arab the steamer takes a pilot on board and is steered by him through a narrow, shallow, and rocky channel (Bôghaz) into the harbour. As the passage can only be effected by daylight, vessels arriving in the evening must ride at anchor outside until next
morning. In the background, to the right, we observe Pompey's Pillar (p. 15), and, on the coast, the Château of Meks (p. 21); to the left, on the prominent Râs et-Tin ('Cape of Figs', p. 16), the palace of the Khedive and the Arsenal. Most of the steamers lie alongside the quays; only those of the Messageries Maritimes and of the Khedivieh Co. cast anchor, but in both cases the processes of landing and embarking are well arranged.

As soon as the brief sanitary inspection is over, the porters and commissionnaires swarm wildly on deck, vociferating in half-a-dozen different languages, and with animated gesticulations precipitate themselves upon the travellers' luggage. The best plan, especially when ladies are of the party, is to secure the services of one of Cook's or Gaze's agents, who relieves the traveller of all trouble, assists in clearing luggage at the custom-house, and conducts the travellers to the special omnibuses for the hotels or railway-station. These agents are recognizable by the official caps, while the Arabs in the service of these firms bear large brass plates on their breasts. A sum of 15-20 pias. generally covers the total expenses of landing etc., but a great deal of trouble is saved by procuring a landingticket when booking one's berth, etc. before leaving home. - The Custom House Examination, which takes place on shore, resembles the process in Europe.

The chief lines of Steamers to Port Sa'id and Isma'iliya are the following: -

1. From Brindisr. Steamers of the P.\& O. Co. leave Brindisi every Sun. night in connection with the Brindisi Express (see p. 2), reaching Port Sa'îd and Isma'îlîya on the following Thurs. (fares 1st cl. 10l., 2nd cl. 6l.; return-tickets 16l., 10l.), returning from Alexandria fortnightly.
2. From Naples. P. \& $O$. steamers leave Naples every second Sun. at 4 p.m., reaching Port Sa'id and Isma'ilîya on the following Thurs. (fares 10l., 6l.); returning from Isma'îlîya and Port Sa'îd on Wed. or Thursday. - Steamers of the Orient Line leave Naples every second Sun. for Port Sa'ìd and Isma'îlìya (fares 10l., 6l.); through fare to Cairo, including railway, 15l.); returning from these ports on Wed, and reaching Naples on Sunday. - North German Lloyd (Southampton boat; see p. 2) steamers, leaving Naples every alternate Wed. evening, reaching Port Sa'îd on the following Sun. (fares $200 \mathrm{~m} ., 150 \mathrm{~m}$. ; to Isma'îlîya 10 m . extra each class); and returning also fortnightly. - The East African liners of the Ham-bury-American Steam-Packet Co., leaving Naples every fourth Wed. reach Port Saîid on the following Mon. (fares $200 \mathrm{~m} ., 150 \mathrm{~m}$.). Navigazione Postale Italiana steamers twice monthly to Port Sa'îd; see No. 4 on p. 3.
3. From Genoa. NorthGerman Lloyd steamers, every alternate Mon. viâ Naples (see above), reaching Port Saîid the following Sun. fares

$250 \mathrm{~m} ., 180 \mathrm{~m}$. , to Ismarilî̀ya 10 m . extra each class). - A steamer of the Rotterdamsche Lloyd leaves Genoa for Port Sacîd every alternate Thursday. - Navigazione Generale Italiana steamers twice monthly to Port Sa'îd ; see under No. 4 on p. 3.
4. From Marseilles. The India and China packets of the Messageries Maritimes, leaving Marseilles every alternate Sun. at 4 p.m., reach Port Sa'îd on the following Frid. (fares 400 fr., 300 fr .); retarning from Port Saiid every alternate Sun. or Sat., reaching Marseilles on Thurs. following. - A steamer of the Nederland Steamship Co. leaves Marseilles every alternate Frid. for Port Sa^îd.

Arrival at Port Sa'îd. As in the case of the approach to Alexandria, the low sandy coast is still out of sight for some time after the steamer meets the yellowish-green water opposite the Nile mouths. The lighthouse and the masts of the ships in port then come in sight and finally the huge breakwaters of the harbour. The custom-house examination for passengers landing here takes place on shore; luggage going on to Isma'îlîya is not examined until that port is reached. For landing in small boats, when the steamer does not lie up beside the quay, $1 / 2$ fr. ; but comp. above.

For the steamboat voyage on the Suez Canal to Ismariliya, see pp. 211209. - Railway from Isma'ilìya to Cairo, see pp. 194-191.

## 2. Alexandria.

Hotels. (It may again be remarked here that all the hotels in the East charge a fixed sum per day for board and lodging, exclusive of liquors, whether the traveller takes his meals in the house or not.) Hốtel Khedivial (Pl.a; G, 4), at the corner of the Rue Chérif Pacha and Rue de Rosette, near the principal station (p. 6); Hôtel Abbat (Pl. b; F, 4), in the Place de l'Eglise. At these two, 60 pias. daily for $R$. and three meals ; R. from 25, L. 2, A. 4, B. 6-8, déj. 20, D. 20-25 pias. - Second class: Hôtel du Canal de Suez, Boulevard Ramleh; Hôtel des Voyageurs, Rue de l'Eglise Ecossaise, moderate; Hôtel Bonnard, R. 3, B. 1 fr.

Cafés. Paradiso, between the Place Méhémet-Ali and the sea, opposite the Rue des Sœurs. 'Café noir' in the European style, or 'café fort' in the Arabian, 1 pias. per cup. There are several other cafés in this quarter, mostly kept by Greeks, with evening concerts (sometimes female orchestra). - Restaurants. L'Univers, in the street leading from the Exchange to the Boulevard Ramleh; Marie Fix, Rue de l'Eglise Ecossaise (German, beer). - Beer. Dockhorn, Fink, both in the street leading to the Café Paradiso. - Bars. Spathis, next the Restaur. l'Univers; Monferrato, Rue Chérif Pacha, opposite the Exchange; Pappa, iu the same sireet, next the Exchange.

Baths. European: at the hotels (see above). Arabian (comp. p. xxvii): in the Rue Râs et-Tîn, opposite the Zabṭiyeh (police-office). - Sea Baths in the Port Neuf; better at San Stefano near Ramleh (see p. 22).

Clubs. Clatb Khédivial, on the first floor of the Exchange, handsomely fitted up, patronized by Europeans of all nations; intruduction by a member necessary; after a week visitors must purchase a ticket of admission. Club Mohammed ‘Ali, Rue de Rosette, opposite the Hôtel Khédivial. Numerous newspapers at both, and also in the reading-room of the Exchange. The Athenceum is a scientific and artistic society, founded and directed by Sir Charles Cookson, British Consul-General.

Cabs. The fare for a short drive in the town, without luggage, is $2-3$ pias., per hr. 8-10 pias., for an afternoon $10-12 \mathrm{fr}$., from $5 \mathrm{p} . \mathrm{m}$. on, $5-7$ fr.; on Sun. and Frid. fares are raised. A bargain should always be
made beforehand, especially for longer drives, e.g. to Ramleh, to which a cab may sometimes be secured for 20 pias. Hurried travellers are recommended to use cabs.

Donkeys (now rarely used by strangers), per ride of $1 / 4 \mathrm{hr}$. 1-2 pias.; per hour 4-5 pias.; longer excursions according to bargain.

Commissionnaires (p. xxi), who are useful when time is limited or when the traveller's cabman speaks Arabic only, abound. They charge $20-30$ pias. per day, but may be hired for temporary purposes for $4-5$ pias. Offers to escort the traveller to Cairo and even up the Nile, should be disregarded, as the only suitable dragomans are to be found at Cairo in winter.

Post Office (Pl. P; F, 3, 4), open from 7 a.m. to 7.30 p.m., except for two hours after noon. Letter-boxes at the hotels and in several of the streets, but those in the side-streets are said to be not always secure. France has a post-office of its own, opposite the English telegraph-office.

Telegraph Offices. Egyptian (Pl. T; F, 4) in the Exchange; English (Pl. ET; F, G, 4), at the W. end of the Boulevard Ramleh, opposite the street leading to the Exchange. The English wires may not be used for inland telegrams (comp. p. xix).

Consulates (comp. p. xx). British, Boul. Ramleh : consuI-general, sir Chas. A. Cookson; vice-consul, Mr. Arthur David Alban. - American, St. Mark's Buildings, Place Méhémet-Ali: consular agent, Mr. Jos. Hewat. French, Place Méhémet-Ali: consul-general, M. Barrère; consul, M.Monge. - German, Rue de Rosette: Hr. Becker; vice-consul, Count Castell-Rüdenhausen. - Austrian, Rue de Rosette: Count Wass; vice-consul, Baron von Leonhardi. - Italian, Bonl. Ismail: Sign. G. de Martino; vice-consul, Sign. Machiavelli. - Belgian, Rue de Rosette: Prosper-Remy, vice-consul. Dutch, Rue de Rosette: Hr. Schütz. - Russian, at Messala: M. de l'illiers, vice-consul. - Spanish, Señ. de Ortega Morejon. - Swedish, Rue du Télégraphe Anglais: Mr. Barker. - Danish, Rue de Rosette: Viconte de Zogheb, consul-general; M. de Dumreicher, vice-consul. - Greek, M. Byzantios, consul-general; M. Buffides, consul.

Steamboat Offices. Peninsular \& Oriental Co., Place Méhémet-Ali; Orient Line, Rue du Télégraphe Anglais (Moss \& Co.); Messageries Maritimes, Boulevard Ramleh (Jul. Ricard); Austrian Lloyd, Place Méhémet-Ali; Navigazione Generale Italiana, Rue Tewfik Pacha (Woivodich); North German Lloyd, St. Mark's Buildings, Rue de la Poste; Austrian Lloyd, Place Méhémet-Ali; Compagnie Russe, Rue Mosquée-Attarine; German Levant Line (from Hamburg), Rue Mosquée-Attarine (Okella Ratib Pacha); Compagnie Khediviale, at 'Thos. Cook \& Son (Egypt) Ltd. (see below).

Tourist Agents. Thos. Cook \& Son (Egypt) Ltd., Place Méhémet-Ali; H. Gaze \& Sons, Place Ste. Catherine; Ugo Orvieto's Agenzia d'Arrivi.

Railway Stations. Central Station, for all lines except that to Ramleh, near the Porte Moharrem Bey (Pl. C, 5). The station for Ramleh (Pl. H, 3) is at the Port Neuf.

Booksellers, both English and French, in the Rue Chérif Pacha, on the S.W. side of the Exchange. Photographs and knickknacks in the same street. - Photographs. Reiser, at the corner of the old Excbange and the Boulevard Ramleh, opposite the English telegraph-office; Lassave, Fiorillo, Rue Chérif Pacha; Fettel \& Bernard, Boulevard Ramleh. - Paintings of Eastern landscapes and genre-scenes from Sconamiglio, in the Hôtel Khédivial. - Several Newspapers (in French, English, and Italian) are published at Alexandria.

Bankers. Banque Impériale Ottomane, above the old Exchange, opposite the back of St. Mark's Buildings; Bank of Egypt, Rue Tewfik Pacha; Anglo-Egyptian Banking Co., Rue Chérif Pacha; Crédit Lyonnais, Rue Chérif Pacha; etc. Most of these have branches in Cairo, a few also in Syria.

Physicians. Dr. Mackie, English; Dr. Varenhorst Pasha, Dr. Kulp, Dr. SchiessBey, Dr. Walther (skin and ear diseases), German; Dr. Kartullis, Greek; Dr. Zancarol. Dentists: Dr. Love; Dr. Keller, Swiss. Oculist, Dr. Tachau. All the addresses may be obtained at the chemists' (see below).

Chemists. Otto Huber, Ruelberg, both in the Rue Chérif Pacha.

Hospitals. The Deaconnesses' Institute, Avenne de Moharrem Bey, is an admirable establishment, managed by Dr. Varenhorst. European Hospital, Boulevard Ismail Pacha; Egyptian Hospital \& Foundling Asylum, near the Ramleh station, an admirable institution, with modern appliances, managed by Dr. Schiess.

Shops for all kinds of European articles are to be found in the Rue Chérif Pacha and the Place Méhémet-Ali: e.g. Curdier, Chalons, Camoin. Ready-made clothing: Meyer \& Co., Stein, Goldenberg, etc. The Arabian bazaar presents no attraction. - Cigars and Cigarettes at H. C. Flick's and the Maison Hollandaise, in the Rue du Télégraphe Anglais, opposite each other.

Churches. English (Pl. 1; F, 4), Place Méhémet-Ali, Rev. E. J. Davis; service on Snndays at 11 and 3 o'clock. - Presbyterian (Pl. 2; F, 3), Rev. Wm. Cowan; service at 11. - Protestant Church (Pl. 3; F, 3), Rne de l'Eglise Anglaise; German and French service on alternate Sundays at 10. - Roman Catholic: St. Catherine (Pl. 4; F, 4) and Lazarist Church (Pl. 5; F, 4). - Two Greek Churches. - Several Synagogues, etc.

At Alexandria there are eight different Freemasons' Lodges, which, however, possess two buildings only, called the Loge des Pyramides or English Lodge (Boul. Ismail) and the Scottish Lodge (Okella Neuve, Place Méhémet-Ali).

Theatres. The large Zizinia Theatre ( $\mathrm{Pl} . \mathrm{Z} ; \mathrm{G}, 4$ ), in the Rue de Rosette, opposite the German consulate, is frequently closed, even in winter. Italian and French operas are given; after Jan. 1st alternately in Alexandria and Cairo.

Disposition of Time. The town may be inspected in $1 / 2-1$ day. Travellers who have never seen an Oriental town will be interested in observing the street scenes and the picturesque faces and costumes; but to those returning home Alexandria presents an almost European appearance, and is unattractive. The official names of the streets are little used or known. Starting from the Place Méhémet-Ali (p. 14), we may first ride or drive to Pompey's Column (p. 15) and the Catacombs (p. 15). We then return to the Place Méhémet-Ali and traverse the long Rue Râs et-Tin to the palace of that name (p. 16). If time permits, a drive may also be taken (best in the afternoon) along the Mahmudiyeh Canal to the public gardens of Ginênet en-Nuzha (p.20).

Alexandria, called Iskanderîyeh by the Arabs and Turks, the second town of Egypt, and one of the most important commercial cities on the Mediterranean, is situated at the W. extremity of the Niledelta, on the narrow sandy strip separating Lake Mareotis from the sea, in E. long. $29^{\circ} 58^{\prime} 30^{\prime \prime}$, and N. lat. $30^{\circ} 2^{\prime} 4^{\prime \prime}$. It contains a population of 200,000 , of whom about 50,000 are Europeans (Franks), chiefly Greeks and Italians, but including also some French and British, and a few Germans, etc. The Mohammedans live almost exclusively in the $N$. and $W$. quarters of the city, the Europeans in the E. quarter, in the villas on the Mahmûdîyeh Canal (p. 20), and at Ramleh (p. 22).

Alexandria has two Harbours, one to the E., the so-called 'New Harbour', now accessible only for fishing-boats, and one to the W. (Pl. A-D, 2-5), the only one now used by larger craft. In antiquity the E., or 'Great Harbour' as it was called, was preferred, for it was then much better sheltered than at present, by a massive mole that has since disappeared. The approach to the W. harbour, the Eunostos, or harbour of those 'returning home in safety', was rendered dangerous by shoals, and was not freely used until the time of the later Roman emperors. Under the Arabs it was the chief haven, and afterwards came to be called (erroneously) the 'Old

Harbour'. Since 1871 it has been enlarged by the addition of an Outer Harbour, about 1800 acres in area. This is protected by a breakwater nearly 2 M . in length, constructed of solid masses of masonry and forming an cbtuse angle. The broad horizontal surface is 10 ft . above the level of the water at low tide. A second pier, or Molo, nearly 1000 yds. in length, protects the Inner Hanbcur, which is about 475 acres in area and on an average 27 ft . deep. From the beginning of this pier a series of new quays extends along the whole E. side of the harbour to the Arsenal (p. 16). The port is entered and cleared annually by upwards of 2000 steamers, more than balf of which are under the British flag. The Mahmûdîyeh Canal (p. 14), which connects Alexandria with the Nile, enters the inner harbour by several locks (Pl. C, 5 ). The chief exports are cotton (over 250,000 tons in 1892), grain, cotton-seed, beans, rice, sugar, onions, etc.

The Climatr of Alexandria is differentiated from that of Cairo by the influence of the sea. In Alexandria the coldest month (January) has a mean temperature of $59^{\circ}$ Fahr., the warmest (August) $80^{\circ}$ Fahr., as compared with $53,7^{\circ}$ and $85^{\circ}$ (in June) at Cairo. In winter the temperature never sinks so low at night as is the case at Cairo (comp. p. lxix).

## 1. History and Topography of ancient Alexandria.

Alexandria was founded in B.C. 332 by Alexander the Great, and forms a magnificent and lasting memorial of his Egyptian campaign. With the foundation of the city are associated a number of legends to the effect that the coast, opposite the island of Pharos, was specially pointed out by divine omens to the Macedonian monarch as a suitable site for the foundation of a new seaport. $t$ The most important earlier harbours on the N. coast of Egypt were those of Naucratis, at the W. (Canopic) mouth of the Nile, chiefly used by Greek vessels after the 26th Dynasty (664-625 B.C.), and Tanis and Pelusium, on the N.E. side of the Delta, to which Egyptian and Phœnician vessels only seem to have been admitted. Alexander conceived the plan of founding a new and splendid seaport town in Egypt, both to facilitate the flow of Egypt's wealth towards Greece and the Archipelago, and to connect the venerable kingdom of the Pharaohs with that widely extended Greek empire which it was his great ambition to found. The site chosen

[^22]
by the king was opposite the island of Pharos, near the ancient Egyptian village of Rhakotis, between the Mediterranean Sea and the Mareotic Lake (p. 23), which was connected with the Nile by several navigable channels. The choice was both judicious and farseeing. For the older, and apparently more favourably situated harbours at the E. end of the Delta, close to the Red Sea, were exposed to the danger of being choked by the Nile mud, owing to a current in the Mediterranean, beginning at the Strait of Gibraltar, which washes the whole of the N. African coast. Deinccrotes, the architect, was entrusted with the planning and building of the new city.

After Alexander's death, when his empire was divided among his generals, Ptolemy I. Soter (323-286 B.C.) came into possession of Egypt. The population of the city increased greatly, and it attracted a large number of Jewish settlers, to whom Ptolemy assigned a suburb on the coast, towards the E. During his wise and upright reign Alexandria became a great resort of artists and scholars, including Demetrius Phalereus, the orator, who founded the famous library, Apelles and Antiphilus, the painters, Euclid, the mathematician, and Erasistratus and Herophilus, the physicians. A history of Alexander the Great written by Ptolemy himself has unfortunately been lost. Under his successor, Ptclemy II. Philadelphus (286-247 B.C.), was founded the Museum, a splendid pile dedicated to science and poetry, in which scholars dwelt as well as studied and taught. Among its distinguished members were Sosibius and Zoilus, the grammarians; Strato, the uatural philosopher; Timochares and Aristarchus, the astronomers; Apollodorus, the physician; Hegesias, the philosopher; Zenodotus, Theocritus, Callimachus, and Philetas, the poets; and the versatile Timon. It was about this period that the Old Testament was translated from Hebrew into Greek, the new version being called the Septuagint from the tradition that seventy translators were engaged in the work. Under Ptolemy III. Euergetes (247-222 B.C), Aristophanes of Byzantium, the grammarian and critic, became the director of the Museum, while the mathematical school was superintended by Eratosthenes of Cyrene, the founder of the science of mathematical geography. At this period Alexandria was also the residence of the orator Lycon of Troas, of the poets Apollonius, the Rhodian, and Lycophron, and of the great astronomer Conon.

Notwithstanding the continual dissensions among the Ptolemies with regard to the succession to the throne (p. cxp, cxvi), which seriously disturbed the peace of the city, the fame of Alexandria, as the greatest centre of commerce in the world and the chief seat of Greek learning, steadily increased, and in B.C. 48, when the Romans interfered in the quarrels of Cleopatra VII. and her husband and brother Ptolemy XIV., had reached its zenith. After the murder of Pompey at Pelusium, Caesar entered Alexandria in triumph
(p. cxvii), but was attacked by the citizens and the army of Ptolemy XIV., and had considerable difficulty in maintaining himself in the Regia (see below). Cæsar was afterwards conquered by the charms of the Egyptian queen, but Antony fell more fatally into her toils, and spent years of revelry with her at Alexandria (42-30). Augustus treated Alexandria with clemency, and enlarged it by the addition of the suburb of Nicopolis on the E. side of the city. At this prosperous period Alexandria is said to have numbered more than half-a-million inhabitants, consisting of Egyptians, Greeks, Jews, Phœnicians, and Italians, all of whom were animated in common with the spirit of enterprise which attracted them to the recently founded city. The Greek element predominated, next in importance to which was the Egyptian, while a numerous, but exclusive, Jewish community was settled here as early as the 4 th cent. B.C.

The Greek scholar and traveller Strabo (B.C. 66-24) describes Alexandria as it was in the decades immediately before the beginning of our era, in the 17th Book of his Geography. The former island of Pharos had been united to the mainland by an embankment known as the Heptastadium (see below), and on the E. extremity of the island rose the famous lighthouse built in the reign of Ptolemy II. Philadelphus, which was regarded by the ancients as one of the wonders of the world, and gave its name of 'Pharos' to all lighthouses afterwards erected. It bore the inscription: 'Sostratos, the Cnidian, son of Dexiphanes, to the gods who protect mariners'. Its original height is said to have been 400 ells ( 590 ft .), and though even in antiquity it threatened more than once to collapse, a fragment of the ancient tower still stood erect until about 1350 . In the 15 th cent. its site was occupied by fortifications ('Fort du Phare'). The Heptastadium, a vast embankment of seven stadia in length ( 1400 yds .), as its name imports, was constructed by Ptolemy Soter, or his son Philadelphus. It was pierced by two passages, bridged over, and before Cesar's time served also as an aqueduct. Having since that period been artificially enlarged by debris from the ancient city, thrown into the sea, as well as by natural deposits, it has attained a width of more than 1600 yds., and now forms the site of a great part of the modern city.

Among the Principal Quarters of the ancient city Strabo particularly mentions the Necropolis or city of the dead, at the extreme W. end, 'where there are many gardens, tombs, and establishments for embalming bodies'; Rhakotis, 'the quarter of Alexandria situated above the ships' magazines', chienly inhabited by Egyptians; the Regia or Royal City, which was walled in, and contained the palaces and public buildings, on the mainland between the Lochias and the Heptastadinm; the Jews' Quarter, situated to the E. of Lochias. Ontside the Canopic gate, on the E., lay the hippodrome, and farther to the E. was the suburb of Nicopolis, 30 stadia from Alexandria, which possessed an amphitheatre and a racecourse, and where the quinquennial games were celebrated.

The town was regularly built, with streets intersecting each other at right angles. The main artery of traffic seems to have been the long street, beginning at the Canopic gate (comp. p. 16), which is probably indebted for its long existence to the conduit constructed under it at an early period, and still snpplying the cisterns with Nile water. Excavations have brought to light distinct traces of the old pavement, which consisted of blocks of granite, and have established the fact that the street was aboat 45 ft . in width, or double that of the other streets. On each side of the eauseway ran foot-pavements with arcades. An almost equally important cross-street, probably constructed in the 2nd cent. after Christ, traversed the E. part of the city from N. to S. Here, between two causeways, each 20 ft . in width, has been found a deep band of soil, on which
probably grew a row of trees; and this street was also provided with a water-conduit. The side-streets were 23 ft . in width.

Of the Principal Buildings of ancient Alexandria the scanty relics of only a few can be identified (p. 15). The locality least free from doubt is the site of the Paneum, which according to Strabo was 'an artificial circular mound, resembling a rocky hill, to which a winding way ascends'. This spot is doubtless identical with the modern Kôm ed-Dik, the highest ground in the town (p. 16). - The Gymnasium probably lay to the W. of this point.

The theatre, the Sema or Soma, and the Museum were sitnated in the quarter of the Royal Palaces (Regia; afterwards called Bruchium) and occupied 'a fourth or even a third part of the whole extent of the city'. The Alexandrian Theatre lay opposite the island of Antirrhodus, so that the spectators had a view of the sea in the background. The Sema or Soma was an enclosed space, within which were the tombs of the kings and that of Alexander. Adjoining the tomb of Queen Cleopatra stood a temple of Isis, remains of which have been discovered at the intersection of the Nabi Daniel Street and the Greek Hospital Street. This discovery should go far to settle the site of the eagerly-sought tomb of Alexander.

The Museum probably stood on a site to the E. of the church of St. Athanasius. According to Strabo, it contained 'a hall for walking, another for sitting, and a large building with the dining-room of the scholars residing at the Musenm.' This 'hall for walking' was an extensive court shaded with trees and provided with fountains and benches, while the hall for sitting was used for purposes of business and stady. The members of the Museum were arranged at their repasts according to the schools to which they belonged (Aristotelians, Platonists, Stoics). Each department elected a president, and the body of presidents formed a council, whose deliberations were presided over by the 'neutral' priest appointed by government. With the vast and artistically embellished buildings of the Museum various other important establishments were connected. The most important of these was the famous Alexandrian Library, which contained 400,000 scrolls as early as the reign of Ptolemy II. Philadelphus, while in Cæsar's time, when it was burned, the number had risen to about 500,000 . The library lay to the N. of the Museum, near the harbour. Besides the revenues enjoyed by the Museum in its corporate capacity, a yearly salary was paid to each member from the time of Philadelphus downwards. Parthey estimates the members in the time of the first Ptolemies at one hundred at least, but it was probably much smaller at a later period. The Alexandrian School was chiefly celebrated for its distinguished professors of the exact sciences, including geography, astronomy, mathematics, mechanics, natural history, medicine, and anatomy. Among its most celebrated scholars were Eratosthenes and Strabo, the geographers; Hipparchas and Ptolemæus, the astronomers; Archimedes, the mechanician; Euclid, the founder of geometry; and Herophilus and Erasistratus, the anatomists. The branch of learning most successfully cultivated by the members of the Museum, however, was grammar, or philology, as it would now be called. 'The task of transmitting to posterity in a pure form the whole of the knowledge and intellectual creations of an earlier period may perhaps be regarded as the noblest aim of philology, and this task was most ably performed by the philologists of Alexandria. It is to their critical labours that we owe the preservation of the Greek literature, which has exercised so great an influence on the culture of the West and on modern history generally'. In these words Parthey sums up the result of the labours of the Alexandrian scholars, whose individual merits we cannot here discuss.

The site of the Serapeum, or great temple of Serapis, which Strabo mentions very briefly, may be approximately determined by the fact that Pompey's Pillar stood in the midst of it. The god to whom it was dedicated was introduced by the Ptolemies, in order that both Greeks and Egyptians might have a deity recognised by both, who should be worshipped in common. To the Greeks he was introduced as Pluto, while the Egyptian priests called him Osiris-Apis (comp. p. 167). The Temple of

Serapis, when completed, is said to have been surpassed in grandeur by no other building in the world except the Roman Capitol. lt lay to the W. of Alexandria, outside the city (like all the temples of Serapis in Egypt), on an eminence ascended on one side by a carriage-road and on the other by a flight of steps, leading to a platform with a vaulted roof borne by four columns. Beyond this were colonnades containing chamhers set apart for the worship of the god, and a number of lofty saloons which at the time of Philadelphus contained a lihrary of $42,000 \mathrm{vols}$. This collection was afterwards much enlarged, and is said to have comprised 300,000 vols. at a later period. Most of the extant images of Serapis are of dark stone; that of Alexandria is said to have consisted of emerald. On its head was the calathos, and at its feet lay Cerherus, with the heads of a wolf, a lion, and a dog, around which was entwined a serpent.

Under the successors of Augustus, Alexandria was repeatedly the scene of civil dissensions. In A.D. 69 Vespasian was proclaimed emperor by the Alexandrians, his election having been to a great extent due to the influence of the philosophers then resident at the Museum. In Trajan's reign (98-117) the Jews, who constituted one-third of the whole population, caused sanguinary riots; the Jewish quarter was destroyed and the ruins seem to have choked the adjoining lake-harbour (on Lake Mareotis), which may, however, have been previously in great part silted up. Under the following emperors also the sciences continued to flourish at Alexandria. In the reign of Hadrian (117-138 A.D.), Valerius Pollio and his son Diodorus, and Apollonius Dyscolus, the grammarians, Ptolemy Chennus, the mythographer, Appian, the historian, and Claudius Ptolemy, the astronomer, lived at Alexandria; and the emperor himself. who visited the city twice, held public disputations with the professors at the Museum. In A.D. 176 Marcus Aurelius (161180) came to Alexandria for the purpose of quelling an insurrection, but treated the citizens with great leniency, and attended the lectures of the grammarians Athenæus, Harpocration, Hephæstion, Julius Pollux, and others. Lucian also lived at Alexandria at this period, in the capacity of secretary to the prefect of Egypt. In 199 Severus (193-211) visited Alexandria, and established a senate and a new municipal constitution. The visit of Caracalla (211-217), whom the citizens had previously derided, was fraught with disaster. Having attracted the whole of the male population capable of bearing arms to one spot, he caused them to be massacred in cold blood. He closed the theatres and the public schools, and to prevent future rebellions he caused a wall fortified with towers to be erected between the Brucbium and the rest of the city.

Christianity early found its way to Alexandria. According to tradition the Gospel was first preached to the Alexandrians by St. Mark (whose bones were removed to Venice in 828), and it is an historical fact that the Christian community was already numerous in the time of Hadrian (2nd cent.). The first great persecution of the Christians, which took place in the reign of Decius (250), was a terrible blow to the Alexandrians. The city had for a considerable time been the seat of a bishop, and had since 190 possessed a
theological school, presided over by Pantænus and at the beginning of the 3rd cent. by Clement of Alexandria, who endeavoured to combine Christianity with the Neo-Platonism which sprang up about this period at Alexandria and was taught by Ammonius Saccas, Herennius, Plotinus, Porphyrius, Jamblichus, and others. A second persecution took place in 257, during the reign of Valerian; and shortly afterwards, in the reign of Gallienus, the plague carried off a large portion of the population. The incessant revolts which broke out in Alexandria and other parts of Egypt led repeatedly to the elevation of usurpers and rival emperors to the throne. Thus, Firmus was proclaimed emperor at Alexandria as a rival of Aurelian, and Probus owed the purple mainly to the Egyptian legions. The Alexandrians afterwards revolted against Diocletian (284-305) and declared themselves in favour of Achilleus; but Diocletian besieged the city, took it by storm, and chastised the inhabitants with great severity.

Christianity, however, still continued to gain ground, and Alexandria was even regarded as the chief seat of Christian erudition and of the orthodox faith. The dogmatic dissensions between Arius, who filled the office of presbyter, and Athanasius, who afterwards became a bishop, at length broke out, and were fraught with disastrous consequences. Alexandria was also soon obliged to yield to Constantinople its proud position as the centre of Greek thought and science. The sanguinary quarrets between the Athanasian party and the Arians under their unworthy bishop Georgius further contributed to the rapid decline of the city. On the accession of Julian to the purple the pagans of Alexandria again instituted a persecution of the Christians. In the reign of Theodosius (379-395), however, paganism received its death-blow, and Theophilus, the patriarch of Alexandria, displayed the utmost zeal in destroying the heathen temples and monuments. The famous statue of Serapis was broken in pieces and burned in the amphitheatre amidst shouts of derision from a Christian crowd. The material prosperity of the city also fell off so greatly, that the municipality was no longer able to defray the cost of cleansing the Nile and keeping the cauals open. After the death of Theophilus (in 413) the revenues of Alexandria were still farther diminished by the proceedings of the new patriarch Cyril, who led the armed mob against the synagogues and expelled the Jews from the city; and in 415 the learned and beautiful pagan Hypatia, daughter of the mathematician Theon, was cruelly murdered by an infuriated crowd. Under Justinian (527-565) all the still existing heathen schools were finally closed, and the few scholars of any eminence who had remained till then were obliged to leave the place.

In 619 Alexandria was captured by Chosroes, King of Persia, but the Christians were left unmolested. Ten years later Heraclius succeeded in recovering possession of Egypt, but the troops of the Khalif Omar soon afterwards invaded the country and tookAlexan-
dria after a prolonged siege. In December, 641, Amr Ibn el- Asi, 'Omar's general, entered the city; but by order of his master, he treated the inhabitants with moderation. The decline of Alexandria now became rapid in inverse ratio to the growing prosperity of the newly-founded capital on the Nile, the modern Cairo. During the middle ages Alexandria sank into insignificance. Its commerce received a death-blow by the discovery of the sea-route to India round the Cape of Good Hope, and the discovery of America entailed new losses. After the conquest of Egypt by the Turks (in 1517) the city languished under the infamous régime of the Mamelukes, the harbours became choked with sand, the population dwindled to 5000 , and the environs were converted into a sterile and marshy wilderness.

The deoay of the once powerful seaport was at length effectually arrested by the vigorous hand of Mohammed ' Ali (see below), who improved the harbours and constructed several canals. The chief benefit he conferred on Alexandria was the construction of the Mahmûdîyeh Canal (begun in 1819). which was so named after the reigning Sultan Mahmud. By means of this channel the adjoining fields were irrigated anew, and Alexandria was again connected with the Nile and the rest of Egypt, the products of which had long found their only outlets through the Rosetta and Damietta mouths of the river. The enterprising pasha also improved the whole canal-system of the Delta, the works being superintended chiefly by French engineers. The subsequent viceroys also made great efforts to improve the prospects of the town; and the Egyptian cotton-trade, which received a strong impulse from the American war, and found its chief outlet through Alexandria, proved a source of great profit to the citizens. The town suffered severely during Arabi's rising in 1882 (p. cxxxi), and a great part of the European quarter was laid in ashes; but the external traces at least of this misfortune have well-nigh disappeared.

## 2. Modern Alrxandria.

The great centre of European life is the Place Mé hemet-Ali (Pl. F, 3, 4), about 500 paces long and 100 paces broad, which is embellished with trees. In the centre rises the Equestria $n$ Statue of Mohammed 'Ali (Pl. M. A.), the founder of the reigning dynasty of Egypt, designed by Jaquemart, and cast in Paris. The statue is 16 ft . in height, and stands on a pedestal of Tuscan marble 20 ft . in height. As the Mohammedan religion forbids the pictorial or plastic representation of the human form, the erection of this monument was long opposed by the 'Ulama, or chief professors of 'divine and legal learning'. This square was the principal scene of destruction in 1882. It is once more surrounded by handsome new buildings. On the N.E. side stands the English Church (Pl. 1 ; F, 4), adjoined by St. Mark's Building (Pl. 8; F, 4), belonging to the

British community and used as a school and for official purposes; on the E. side is the International Tribunal (Pl. Tr.; F, 4). These are the only buildings which escaped the fury of the natives in 1882. Beside St. Mark's Building is a bust of General Earle, who fell at Birbekan in 1885. - From the centre of the W. side of the square runs the long and straight Rue Ibrâhîm, constructed through an old and crowded Arab quarter.

From the $S$. corner of the square we reach the triangular Place de l'Eglise, or Square Ibrâhîm (Pl. F, 4), the former name being derived from the Roman Catholic church of St. Catharine situated here. The Rue de la Colonne Pompée leads hence to the $S$. to the Porte de la Colonne Pompée, or Porte du Nil (Pl. F, 5).

Outside this gate we pass a large Arabian cemetery, lying on the right, and soon reach an eminence covered with rubbish and fragments of ruins, on which rises *Pompey's Column (Pl. E, 6; Arab. 'Amud es-Sawâri). The monument is composed of red granite from Assuân, which has withstood centuries of exposure to the elements; and it is now the only important relic of antiquity in the city. The pedestal, composed of several blocks which once belonged to other buildings, was formerly covered by the earth and is much damaged. The height of the column, together with the disintegrated, or perhaps never quite completed, Corinthian capital, and the pedestal, is 104 ft .; the shaft is 67 ft . high, and is about 9 ft . in diameter below, and not quite 8 ft . at the top. The proportions produce an exceedingly harmonious effect. The pillar was probably erected at the same time as the Serapeum (p.11), the terraced erection of which it crowned. At the beginning of the 4th cent. after Christ, a Roman prefect named Pompeius caused a dedicatory inscription to be carved upon it to the 'holiest autocrator, the town-genius ( $\pi 0 \lambda \lambda_{0} \sigma^{2} \gamma \rho \varsigma$ ) of Alexandria, the unconquered Diocletian'. But this prefect did not erect the column; still less has it anything to do with Pompey the Great. - The cemetery at the foot of the pillar is very extensive. The images of kings and fragments of columns in the vicinity probably belonged to the Serapeum (p. 11).

Following the road a little farther, and diverging to the right near the Gasworks, we skirt the S. slope of a low plateau and in about 10 min . reach the Catacombs (Pl. D, 7).

From this point to the vicinity of the Serapeum (see above) the sloping, rocky ground is honeycombed by a great number of subterranean passages and tomb-chambers. The traveller's guide (or cabman) will fetch the keeper who is generally in the neighbourhood (2 pias.; other offers of assistance should be rejected). A brief visit should first be paid to Two Groups of Tombs on the S. Slope; in the first of which are a wall of rock with numerous tomb-openings, and a large chamber in three parts hewn out of the rock, with a considerable sarcophagus; and in the second (sometimes under water) another sarcophagus decorated with carvings. The traveller should then proceed round the S.W. shoulder of the hill to the W. Group of Tombs, discovered in 1893 by Dr. Botti (p. 17) and highly interesting. We descend a zigzag path to the 1st Chamber, adjoining
which are ten larger side-chambers or chapels, with entrances marked by columns, a continuous architrave with toothed-moulding, and pediments. On the pediment to the right is a cross, while the carving of the left pediment has been destroyed. The last three chajels are unfinished, the niches alone being hollowed out. At the back of the first chamber is the 2nd Chamber, with two niches on each side and one in the middle. In the second niche to the left is an air-shaft. At right angles to these chambers is the $3 \because \cdot d$ Chamber, with shelf-tombs; and farther to the right, in the same line as the first two, is the large 4 th Chamber, with about 50 shelf-tombs. T'hose in front to the right exhibit early Egyptian paintings: the Uræus-snake, the Hathor-cow, below, to the right and left; to the left a human (or divine) figure, to the right, serpents, both defaced. On the inner sides of the entrance are other figures: hawks with outspread wings, etc. The chambers contained numer us bones and skulls, and are connected with each other by means of several holes. The excavations are still going on.

The main portion of the Arab quarter lies on the ancient Heptastadium ( $p .10$ ), between the E. and the W. harbours. Its chief thoroughfare is the Rue Râs et-Tin (Pl. F, 3), which begins at the N.W. corner of the Place Méhémet Ali (p. 14), traverses the Arab quarter, and then bends to the $W$. to traverse also the adjoining Turkish quarter (Pl. D, E, 2), on what was formerly the island of Pharos (p. 10), with less narrow streets and handsome houses and gardens. Both these quarters present interesting scenes of Oriental life. The street endsat the viceregal --

Palace of Rás et-Tin (P1. B, C, 1, 2), a name signifying 'promontory of figs'. The palace, which was built by Mohammed 'Ali and restored by Isma'il Pasha, is uninteresting. The balcony, however, commands a fine view of the extensive harbour. (Admission by ticket procured at the Consulate.) The Harem, a separate building, facing the sea, is built on the model of the seraglio at Constantinople. A visit to the neighbouring Lighthouse (Pl. A, 2) is very interesting, especially in the early morning, but admission is granted only to those provided with an order from the governor, which may be obtained through the British or American consulate. The Naval Arsenal (Pl. D, 1) is not worth visiting.

The Rue de Rosette (Pl. F-I, 4), leading to the E. from the centre of the city, is another important thoroughfare. It corresponds with the E. half of the ancient main street (p.10), and the Porte de Rosette (Pl. K, 4), at its E. extremity, occupies the site of the ancient Canopic Gate. - On the top of the Kôm ed-Dîk (Pl. H, I, 5; 115 ft . ; comp. p. 11), a hill to the S. of the Rue de Rosette, is the reservoir of the water-works oponed in 1860. The water is pumped up by steam-power from the Moharrem-Bey Canal, a branch of the Mahmûdìyeh Canal.

The house known as 'Kirkor', in the E. part of the Rue de Rosette, accommodates at present the newly-founded Museum of 正gypto-Greco-Roman Antiquities. This museum is the practical outcome of the united efforts of the Athenaeum Society (p. 5), the municipal authorities, and the directors-in-chief of Egyptian Antiquities, supported by the present Khedive. The private collections of earlier
decades have long since found their way abroad. The discoveries made at Alexandria were taken, under Mariette and Maspero (p. 94), to the Museum of Gîzeh, but have been brought back since the establishment of the Alexandria Museum. The curator of the museum is the energetic $D r$. Botli, director of some of the excavations near Alexandria, who discovered the tombs of Haḍra in 1892, and has recently explored the remains of the Serapeum. - The museum is open on Mon., Tues., Wed., Thurs., and Sat., 9-12 and 4-6 (adm. 2 pias.), and on Frid, and Sun., 8-12 (adm. 1 pias.). The catalogue, which may be purchased at the entrance (Notice des Monuments exposés au Musée Grêco-Romain d'Alexandrie, 1893, by G. Botti), is not necessary for the ordinary visitor.

Early Egyptian Monuments. - Room A. Case A: Mummies of the 22nd Dynasty ( $980-810$ B. C.); Osiris myth; deities from Memphis and Thebes. - Case B:Above, Small tomb-figures found at Dér el-Bah ic (p. 120), of the 18 th, 22 nd, and 26th Dyn., the best being Nos. $304,306,313-315$, 359, 361, 362, 362b (Psammetikh, son of Amneritis); below, Amulets of the dead, scarabæi, grotesque figures of Hercules (Bes), Ammon feathers, sacrificial bulls, etc.; at the bottom of the case, alabaster Canopic vases. Case C: Lid of the sarcophagus of Khunsu-em-heb, Priest of Ammon, of Thebes, also from Dêr el-Bahri (sarcophagus, see p. 121). The representations on the lid refer, on the left side, (1) to Isis and Nephthys, (2) to Nnt, mother of the sun, who receives Khunsn-em-heb into her bosom, and (3) to Osiris; on the right side, Osiris and Isis-Nephthys, Khunsu-em-heb offering a libation; on the edge to the right, disk (sun-disk), Uræus-serpent, tomb-genii, etc. - In Case E, opposite, is the inner lid of the same sarcophagus, similarly adorned. - Case G: Breast-cloth of a mummy, representing the Judgment of the Dead; the soul of the deceased stands erect in mummy-form beside the goddess Ma; Anubis and Hor weigh the heart of the deceased against Truth. The wreath in the middle of the case was found in the sarcophagus of Khunsu-em-heb, and is thus at least 3000 years old.

Monuments of the Greco-Roman Period. - Room B. From right to left, window-side: 1749. Marble foot with sandal, connected at the top with a bust of Serapis; on the back, serpents representing Osiris and Isis, with the child Horus seated on the latter; dedicated as a votive offering for recovery, attained or besonght, by Pakeitis Zosimos and Ailios Doryphoros. - In this and the following room is a series of basalt statues and statuettes, some of which recall Sarzec's discovery at Tello by their archaic sharp-edged forms. They were found in the course of excavations carried on by M. E. Grébaut at Dimeh near Birket elKurûn. Their date and stylistic position are still undecided. - Case C: Terracotta figures of animals. Statues of Venus. Remains of the wallcovering from Tell el-Yehûdîyeh (comp. Gîzeh Museum, Room XLIV). In the central compartment: 1197. Greek sepulchral stele, representing a man seated, staff in hand, in an arm-chair, of very distinct and delicate workmanship; 1742. Greek tombstone, with a boy holding a bird in his hand and playing with a dog. - Case B: Alexandrian terracottas from the Fayûm. Upper row: flgures of Harpocrates; lower row: dancing Hierodules. - Adjacent, two marble figures of the triple-bodied Hecate, much damaged. - Case A: Alexandrian terracottas from the Fayûm, including an interesting series of terracotta figures relating to the mysteryworship of the Thesmophorion, outside the Rosetta ate: 811-828. Demeter with the torch; 829. Kore; also, 867-876. Isis; 877-932. Horus; 788-792, Jupiter; 743 et seq., Jupiter-A mmon; 745-810. Serapis.

Room C. From right to left, window-side, opposite the entrance: 1782. Portrait-statue of Eirenaios, in basalt, found at Dîmeh and, as stated by the Greek inscription on the mantle-border between the legs, dedicated by Eirenaios to the god Soknopaios. In the Glass-Cases $C, G$,

Baedekeh's Egypt I. 3rd Ed.
and $E$ : Mummies from el-Rubayât in the Fayûm, with portraits painted upon wood in the encaustic manner (the Semitic type of the faces in case $E$ is unmistakable), 2nd cent. after Christ. - Case A: Chiefly sepulchral utensils from the E. necropolis of Alexandria. Small, amoothly worked vessels, mostly without ornament. Un No. 2032 a woman's head is painted; No. 2034 is Cyprian, after an Egyptian model. - S. side: Marble statuette of Bellerophon upon Pegasus, placed against a marble pillar probably used as the support of a table (trapezophoros); the motion is vividly conceived, but the execution is mediocre. In front, 1774. Torso of a limestone statue of Athene; 1773. Marble head, perhaps of Demeter; 1775. Head from a statue of a Muse. - Case B. In the upper section : Terracottas from the Fayûm, small vases, and glass. The terracotta figures include: 1079-1090. Adonis; 1091-1103. Aphrodite, cronching, as Anadyomene, etc.; 1104-1123. Eros, erect or sleeping; 1131-1142. Caricature-subjects from the circus; 1143-1168. Theatrical types from Alexandrian comedy. Also humorous subjects, some in caricature, notably 1152 (2127). Frog playing on a lyre and seated on a fish, perhaps intended as a burlesque of Arion on the dolphin. 2129. Vivacious figure of a comedian. - In the central cross-compartment: Fragments of caskets in ivory and horn. - In the centre of the room: Two mummy-coverings with gold masks from ElRubayât in the Fayûm. At the top of Glass-Case $D$, Roman glass vessels; below, Alexandrian cinerary urns. The works in marble include the following: 1720. Portrait-bust of a young Roman, with an admirably reproduced expression of intelligence, self-reliance, and strength of will; 1717. Head of Asklepios, in sketchy but admirably characteristic workmanship, of the pre-imperial epoch. - 1727. Roman female head; the hair (now wanting) was formed of a separate detachable piece of marble, which could be replaced by another when the fashion of dressing the hair altered; the ears were originally adorned with jewels. The back of the head is flat, and ornamented with an egg-and-bead moulding, proving that the marble was previously used for some architectonic purpose. - Upon the wall-cases are cinerary urns of a kind peculiar to Alexandria, excavated in 1885 at Hadra (Eleusis), most of them with simple polychrome ornamentation (garlands, gorgons' heads, etc.) upon a white ground. Inscriptions painted or engraved on the vases give the names of the deceased whose ashes the urns contained, and trequently also the names of the official superintendents of the interment, and a date. Among the names occur those of mercenaries serving under Ptolemy IV., V., and VI., and of Greek theori attending the religious festivals at Alexandria.

Corridor of Inscriptions. Sepulchral reliefs and inscriptions of varions epochs. To the right and left of the entrance to Room C are two tombstones of a white and highly porous limestone, resembling Attic sepulchral steles in form; the depression in the centre contained the now obliterated painting of the deceased. Room E contains additional specimens in better preservation.

PASSAGE. In the centre of the N. side: 1818. Colossal marble bust of Isis, recognizable from the folds of the garment on the breast. 1820. Limestone relief from Alexandria: to the left, the bearded Osiris-snake wearing the Egyptian double crown (pshent), in the coils the serpentwand of Hermes; to the right, the Uraus-snake of Isis with the sun-disk upon her head and the sistrum; between these, Demeter with the cornmeasure and torch (comp. the similar relief in Room D). *1817. Greek tombstone with the representation of a lady named Stratonike, lying on her death-bed, with two female attendants. The imitation of Egyptian art in the treatment of this relief, which is modelled within the incised outlines without any deepening of the background, is noteworthy. Similar imitation may be observed also in other works. 1824. Colossal head of Serapis, in a decorative style, from the early imperial epoch. 1828. Fragment of a sarcophagus of the kind originated at Alexandria, the characteristic ornamentation of which is in the form of garlands in relief, the garlands being snspended from ox-sknlls, putti, eagles, candelabra, or (as here) figures of Victory.

Rqom D. Monuments chiefly of the late-Roman epoch. In the upper
division of Case $A$ is a rich collection of lamps of varions dates, some from the Fayûm. Those with a black glaze and three ears of corn on the back, as trade-mark, are of Alexandrian origin. The subjects most freqnently represented are Aphrodite in the shell, Isis, and Serapis. In the central division are Christian lamps and theatrical masks in clay. In the upper division of Case $B$, to the right, are terracottas from Kôm el-Khugafa near Alexandria (1892); to the left, 2162. Small marble head with a good and realistically faithful portrait of Alexander the Great (the resemblance to the so-called 'Azara bust' in the Louvre, which is authenticated by an inscription, is unmistakable). In the lower division is a collection of so-called 'Menas-flasks', round and flat terracotta ampulæ, with the figure of St. Menas, a soldier under Maximinus, who sutfered martyrdom by beheading in A. D. 296 and was buried at Alexandria. -Glass-Case $C$, and Shono-Cases $D$ - $\boldsymbol{G}$ : Textile fabrics and embroidery from Akhmîm (10th cent. after Christ). In the middle of the roam is a marble relief from Alexandria with two serpents representing Isis and Agathodæmon (or Osiris?).

Room E. Cinerary urns from the Jewish cemetery at Khatby, to the E. of Alexandria (vases of similar form have also been found near Jerusalem). On the walls are Alexandrian tombstones, some with paintings in good preservation. 1849. Stele from Sarapia (Kôm el-Khugafa). Wall Case $A$ contains some interesting terracotta figures resembling those from T'anagra, and a small bronze figure of Serapis bearing a cross on her back.

Room $F$. In a tablet on the wall to the left of the entrance is the original plan of the excavations completed in 1867 by Mahmûd Bey for the Khedive Isma'il. This plan, rediscovered by Dr. Botti, enabled Mahmûd to determine the extent of the streets of ancient Alexandria and the position of some of its principal buildings. Adjoining are plans of more recent excavations; a diagram of the conrse of the antique subterranean aquednct, part of which is still in use, etc. On the walls also are some late-Roman and Coptic inscribed stones. In the middle of the room is a collection of coins of the Ptolemaic and imperial epochs. - We now proceed through the second Corridor of Inscriptions to -

Room G, which contains votive stones, bases and steles with inscriptions of historical interest, and casts of earlier discoveries made in Egypt. - 2450. Cast of the stele of Alexander II., son of Alexander the Great, found in 1870 in the foundations of the mosque of Shêkhûn at Cairo. The inscription, which is dated in the seventh year of Alexander II.'s reign, refers to the recapture and restoration by Ptolemy, son of Lagos, of the temple-treasnres carried off by the Persians. Ptolemy still calls himself 'Satrap of Egypt' and resides in the 'fortress of King Alexander I. which was originally called Rakôti' (meaning the new royal residence of Alexandria). The original is now in the musenm at Gizeh (Room XXXVI, p. 108), as is also the original of the Stone of Tanis (24512453); see p. 109, Gîzeh Mnseum, Room XL, No. 289. - 2454. Cast of the celebrated Rosetta Stone, now in the British Museum (comp. pp. cxxxiii, 225), with an inscription in hieroglyphic (or sacred), demotic (or popular), and Greek characters, which supplied the key for the deciphering of the ancient Egyptian hicroglyphic inscriptions. No. 2456 mentions the Samothracian mysteries; 2461 refers to the despatch to Sinai of an offlcer named Sotirikos, belonging to Ptolemy VII.'s body-guard. - 1871. High-relief of Leda, Jupiter as the swan, and Cupids, found by Naville in the Fayûm, of exceedingly crude and distorted workmanship (Coptic?). - In the middle of the room : *1848. Colossal marble arm of good workmanship, probably Roman, perhaps the remains of an honorary statue of an emperor. The sphere in the hand is unusually small if it is intended to represent the terrestrial globe; found at Benha, the ancient Athribis.

Room H. To the left, at the entrance, 1849. Cast of a basalt relief, now in the British Museum, with the figure of Hermes walking, remarkable for its imitation of the archaic style; found on the site of the temple of Serapis built by Ptolemy Euergetes I. at Canopus. Beneath, marble head of the Emperor Marcus Aurelius. - Case A contains sepulchral pases of the Alexandrian variety described above (Room C), includ-
ing 2468. Cinerary urn of the cavalry-colonel Menekles of Crete, who was buried at Eleusis in the fifth year of the king (Ptolemy IV. Philopator), i.e. 217 B. C. - Case B: Cinerary urns and terracotta figures from Kôm el-Khugafa, the W. necropolis of Alexandria, and from Ibrahinmiyeh, the E. necropolis. - Case C: Small alabaster figure of the goddess Neith, from the ruins of Sais. - In the middle of the room, Glass-Case D: 2867 et seq. Fragments of Greek and Syrian papyri; 2870-2875. Wooden writing-tablets covered with wax ; 2876-2910. Potsherds (ostraka) with demotic (2076-2881), Greek (2881-2885), and Coptic inscriptions; 2800-2866. Wooden tickets with the name of the deceased, to be fastened on the neck or breast of mummies for the purpose of identification; adjacent, hair-net of gold thread and a gold ring from a sarcophagns, from Abukîr. - Case $E$ : Coptic MSS.; "1854. Small marble figure of Apollo seated upon the Delphic omphalos, an admirable work of the early Ptolemaic period, found at Alexandria. 1853. Cast of the figure of a fettered barbarian kneeling beneath a trophy, the fragment of a Roman group, in which the same figure was repeated on the other side of the trophy (original in the British Museum). - Case I: Articles discovered at Hadra in 1894, including limestone figures of two sphinxes and a hawk. In the compartment above, Upper part of a terracotta figure of a mother carrying her child on her shoulder (exactly in the modern style, p. 40). In the two upper divisions of the case are Alexandrian caricature-figures in terracotta, some very coarse. - Case $K$ : Articles found at Hadra. In the upper corner, to the left, two fragments of broad glass-mosaic plaques with floral patterns, of the kind used by Alexandrian architects for lining walls.

The Court of the museum contains a few statnes, inscriptions, and architectural fragments.

A new building for the museum is in course of erection in the same street, next to the Town House. A number of sarcophagi have already been removed thither, also a fine female statue in the Greek style, statues of Serapis and of the seated Hercules, and a number of Egyptian monuments.

Mr. Ed. Friedheim, at the British Consulate, in the Boulevard Ramleh, possesses a collection of Italian, Spanish, and Netherlandish paintings of the 17 th cent., and also numerous modern works, which he courteously shows to strangers on previous application. Fine view.

## 3. Environs of Alexandria.

A pleasant Drive (carr., p. 5) may be taken as follows. Turning to the right outside the Porte de Rosette (Pl. K, 4), leaving the European cemeteries to the left, and avoiding the road which leads in a straight direction to Ramleh, we pass the water-works on the left ('Distribution des Eaux'; Pl. K, 5), cross a small mound of ancient rubbish, and reach the Mahmûdîyeh Canal (p. 14). To the right is the viceregal château Nimreh Telâteh ('NumberThree'), with its garden. We turn to the left, drive for a short time along the canal, and soon reach the entrance to the Ghinènet en-Nuzha, or public garden (usually called the Jardin Pastrê). Europeans will be interested by the profusion of exotic plants which thrive here in the open air. The gardens are a full hour's walk from the Place Méhémet-Ali. Nuzha is a station ou the Meks railway, mentioned below. A little higher up is a fine garden belonging to Sir John Antoniadis, a rich Greek merchant, who has liberally thrown it open to the public. (A pleasant road leads straight on hence to Ramleh,

p. 22.) - Retracing our steps, and following the bank of the canal, which lies on the left, we observe on the right a long succession of villas and gardens, including the above-mentioned château Nimreh Telâteh, with its handsome entrance, and the château and garden of Moharrem-Bey (P1. I, 6). We may now re-enter the city by the Porte Moharrem-Bey, or by the Porte de la Colonne Pompée.

The somewhat uninteresting Excobsion to Mexs may be made either by railway or by road (carr., p. 5). In the former case we start from the principal station (P1. G, 5), pass the intermediate stations of Hadra (the ancient Eleusis) and Nuzha, cross the Mahmûdîyeh Canal, and then turn towards the W. (comp. Pl. C, B, 7). The road (Pl. C, B, A, 6) traverses the dirty suburb of Gâbri, which occupies the site of the ancient Necropolis (p.10). Near the railway-station of Gâbri is an English club, with a racecourse ('Hippodrome', Pl. B, 7; races in spring). Between the road and the railway is an old palace with a mosque, converted into a Quarantine ( Pl . A, B, 7) or lazzaretto. In the friable limestone of the coast-hills are a number of tomb-chambers; but most of them have been destroyed by the inroads of the sea, and are now covered up. These chambers, which contain nothing interesting, have been styled the Baths of Cleopatra. Farther on, to the left of the road, is the grotesque halfruined Château of Meks, with its numerous domes and slender to wers. It was erected by the viceroy Saî̀d Pasha, who used to reside here in summer. To the right, close to the sea, is the Bâb el- Arab ('Beduin Gate'), the extremity of a line of fortifications extending between the sea and Lake Mareotis (p. 23). The quarries of Meks supplied the material for the construction of the new harbour-works. No fewer than 30,000 artificial blocks, weighing 20 tons each, and 2 million tons of natural blocks of stone were thus used.

Ramler is connected with Alexandria by a road beginning at the Porte de Rosette and by two railways. On one of the railways, however (Abukîr-Rosetta line, p. 223, starting from the principal station, Pl. G, Б), there is only one train daily to Ramleh.

The Dirbct Railway to Ramlef has a special station near the 'New Harbour' (Pl. H, 3, 4), to the N.E. of the town. Trains run hence hourly on week-days and half-hourly on Sun. (fares 6 or $31 / 2$ pias.). To the W. of the station stood, down to March, 1880, the famous obelisk called Cleopatra's Needle, dating from the time of the Pharaohs, but erected here by Tiberius. It was sold to the city of New York by the Khedive Isma'îl.

It was only the public sympathy with the young Khedive Tewfik, who looked upon the operation as a legacy of his father's government, that prevented a popular outbreak while this interesting relic was raised by American machinery from the place it had occupied for 1800 years and removed to the specially constructed vessel that was to convey it to New York. The obelisk now forms one of the prominent features of the Central Park in New York. - A companion obelisk, that lay for centuries prone in the sand by the side of Cleopatra's Needle, now adorns the Thames Embankment at London.

The so-called Roman Tower (PI. H, 3), 1/4 M. to the E. of the station, seems to be of Arabian origin. - Projecting into the sea, to the left, soon after the departure, is the small Fort Silseleh. We here obtain a retrospect of the sickle-shaped S.E. side of the town.

The railway then traverses the rubbish heaps of the ancient Nicopolis, the large E. suburb of Alexandria founded by Augustus on the site of his final victory over the adherents of Antony. On an eminence to the left of the station of Sidi Gaber is the ruined viceregal château of Mustafa Pasha, built by Isma'îl Pasha near the remains of the Kasr eil-Kayâsereh ('Castle of Cæsar'), which provided material for the chatteau. A small ruined temple was found close to the sea. Beyond Sîdi Gaber is a Château, built in 1891 as a summerresidence by the mother of the present Khedive. The Catacombs situated to the N.E. of this point are almost entirely destroyed. The train now passes a series of villas and gardens full of luxuriant vegetation, the most attractive of which lie beyond the fourth of the five stations.
$61 / 2$ M. Ramleh (i.e. 'sand') is a modern place, consisting chiefly of numerous country-houses, some of which are occupied by Alexandrian families throughout the whole year. It possesses water-works of its own, and has several pensions for sumner-visitors. The finelysituated club-house at San Stefano is a fashionable resort from Alexandria (large rooms, good cuisine, and excellent sea-bathing). On the way to the sea the traveller will observe a few relics of the Greek and Roman periods. - Between Ramleh and Abukîr (p.223) is the new viceregal villa of Muntazah.

## 3. From Alexandria to Cairo.

130 M . Railway. Express train in $31 / 3-31 / 2 \mathrm{hrs}$., fares $\mathscr{E L}$. 1. 5 pias. or 52 pias.; ordinary train in $61 / 4 \mathrm{hrs}$., fares 88,44 pias.; return-tickets, available for a week, $\mathscr{E} E .1 .32$ pias. or 66 pias. Luggage up to 25 kilogrammes ( 55 lbs .) may be taken in the carriage free. The tariff for luggage in the van is very complicated; 70 kilogrammes ( 154 lbs .) from Alexandria to Cairo cost about 25 pias. - Travellers should reach the station at least half-an-hour before the advertised time of departure and should engage the commissionnaire of the hotel or an agent of Cook or Gaze (p. 6) to assist in booking their luggage, an operation carried on by the employes with those alternations of apathetic indolence and violent hurry which are so characteristic of Orientals. - The more important stations have buffets in the European style, where cold meat, fruit, wine, and liqueurs may usually be obtained. Fine mandarin and other oranges, and also water, are hawked on the platforms ( $3-5$ oranges $1 / 4-1$ pias.; overcharges are a matter of course). - The Alexandria and Cairo line, the first railway constructed in the East, was made uuder Sarid Pasha in 1855.

The railway to Cairo traverses gardens towards the N.E., and beyond Sidi Gâber diverges to the right from the line to Rosetta (p. 223). To the left is the ruin of the Kasr el-Kayâsereh (see above), situated on the coast, with the château of Ramleh (p.22) in the distance. It then crosses the Mahmudiyeh Canal (p. 14) and skirts its S. bank nearly as far as stat. Damanhûr (see below). To the left lies
the Lake of Abukir (Beheret Máadîyeh); to the right is Lake Mareotis (Behêret Maryût), the water of which washes the railway embankment at places during the period of the inundation.

The Lake Mareotis, or Maveia, as it was also called in ancient times, bounds Alexandria on the S. side. In Straho's time it was filled from the Nile hy means of numerous canals, both from the S. and E., which brought great traffic to this inland harbour, while the sea-harbour was more important for the export trade. The lake, which lies 8 ft. helow the sea-level, was once surrounded by a lnxuriantly fertile tract of country, irrigated from the Nile as early as the time of Herodotus. The banks once yielded excellent white wine, which has been extolled by Horace and Virgil, and is mentioned by Athenæus as having been particularly wholesome. Egypt now produces very little wine, but reminiscences of its culture in the region of Lake Mareotis are still preserved in the name Karm (i.e. 'vineyard', pl. kurûm), which the Arahs apply to some ancient ruins here, and in numerous wine-presses hewn in the rocks.

During the Arabian and Turkish régime the waters of the lake gradually subsided, but in 1801 , during the siege of Alexandria, the English cut through the neck of land between the lake and the sea near the so-called Maison Carrée, a little to the W. of Abukîr, thus laying an extensive and fertile region under water and destroying about 150 villages. The present Es-Sett marks the spot where the fatal cutting was made and afterwards closed. Mohammed 'Ali did all in his power to repair the damage and to improve the environs of Alexandria, but about 100,000 acres of cultivable land are said still to be covered by the seawater. The water is now evaporated for the sake of its salt, the right to manufacture which is farmed out by government.

We observe at intervals the sails of the barges on the Mahmûdîyeh Canal, and long strings of laden camels traversing the embankments. 17 M . Kafr ed-Dawâr was the point at which Arabi erected his strongest fortifications in 1882, after the English had occupied Alexandria and Ramleh. - 28 M. Abu Homs, a group of mud-hovels. - The Arab villages seen from the lofty railway embankment present a curious appearence.

381/2 M. Damanhur (second station at which the express stops, reached in 1 hr .), the capital of the province of Behêreh, with 23,000 inhab., was the ancient Egyptian Tema-en-Hor (city of Horus), and the Roman Hermopolis Parva. The town lies on an eminence and contains some tolerably substantial buildings. Among them are several manufactories for the separation of the cotton from the seeds, and above them tower several minarets. The Arabian cemetery lies close to the railway. In July, 1798, Bonaparte, on his victorious expedition to Cairo, selected the route viâ Damanhûr, which at the time was so excessively parched and burned up that his soldiers suffered terribly, while he himself narrowly escaped being taken prisoner by the Mamelukes. In Nov., 1802, the Mamelukes here inflicted a signal defeat on the Turks. A large market is held at Damanhûr on Sundays, and a smaller one on Fridays.

To the S.E. of Damanhûr, on the ancient Canopic arm of the Nile, near the modern Nebireh, lie the ruins of Naucratis, a Greek commercial city, founded by Aahmes. The rains, discovered by Prof. Flinders Petrie and excavated in 1885, do not repay a visit.

## Brance Railway from Damanhûr to Er-Ramaniyeh, see p. 222. - To

 Rosetta, see p. 224.$53^{1 / 2} \mathrm{M}$. Teh el-Bârud, a village with a large mound of ruins, is the junction for a branch-line skirting the W. coast of the Niledelta. None of the express-trains stop here.

This Branch Line is an alternative route to Cairo, but is of no importance to tourists. There is only one train daily (in 4 hrs.). The stations are insignificant. The last one is Embabeh (p. 92), beyond which the line crosses the Nile by an iron bridge and enters the Zabṭiyeh station at Cairo (p. 27).

The cultivated land becomes richer, and we pass villages and groups of trees, including tamarisks. The train reaches the broad Rosetta arm of the Nile, crosses it by a long iron bridge (fine view to the left), and enters the station of -

64 M. Kafr ez-Zaiyat (third station at which the morning-express stops, $11 / 2 \mathrm{hr}$. after leavingAlexandria; the afternoon-express does not stop here). The town, which carries on a busy trade in grain, cotton, and the other products of the Delta (p. lxxiv), lies on the right bank of the river. - Excursion to the ruined site of Sais, the modern $\$$ â el-Hager, see R. 14 d .

The Delta in Winter. 'The fields are still wet at places, and straight canals are seen in every direction. All the cereals grown in ancient times still flourish here, and the slender palm still rears its fruit-laden crown beside the less freqnent sycamore, with its slender umbrageous foliage. The cotton-plants are successfully caltivated where the soil is well irrigated, and form extensive plantations of underwood, bearing a profusion of yellow, red, and white blossoms, which somewhat resemble wild roses. Vineyards are rare, but they sometimes occur in the northern part of the Delta, the plants being trained on the trellis-work which we often see represented in the paintings of the ancient Egyptian tombs. The water-wheels (sâkiyeh) are turned by buffaloes and donkeys, and sometimes by camels or by steam; and the water-pail (shâdûf), though less common than in Upper Egypt, is occasionally plied by slightly clad men and boys. The canals are flanked with embankments to protect the fields from inondation, and the paths on these banks are enlivened with strings of camels, donkeys with their riders, and men, women, and children on foot. From a distance the villages look like round, grey hillocks, full of openings, and around them rise dovecots and palm-trees. On closer examination we distinguish the mud-huts, hnddled together on rising ground where they are safe from the inundation. Many of these hamlets are adorned with very handsome groups of palms, while the minarets which overtop the larger villages and towns seem to point as devoutly to heaven as our Gothic church-spires'. (Ebers, 'Goshen', etc.)

76 M . Tanṭa ( 2 hrs . from Alexandria, $11 / 2 \mathrm{hr}$. from Cairo).
Opposite the station is an Inn kept by a Greek. The Greek Restaurant on the Canal, near the Bazaar, is patronised by European merchants from Cairo and Alexandria during the fair of Tanta.

Consular Agents. British, Mr. Jos. Inglis; German, D. Dahhan; French, $M$. Athanasi.

Tanta, the thriving capital of the province of Gharbîyeh, which lies between the Rosetta and Damietta arms of the Nile, with a population estimated at 35,000 souls, possesses large public buildings, bazaars, and an extensive palace of the Khedive.

The Mosque of the Seyyid el-Bedawi, having been recently restored, presents a handsome appearance. The large court contains the basin for ablutions (pp. xci, cxcviii).

Beyyid Ahmed el-Bedawi is probably the most popular saint in Egypt, and the most frequently invoked. He is said to have been born in the 12th cent. at Fez, or according to others at Tunis, and to have settled at Thanta after a pilgrimage to Mecca. He is credited with the possession of great personal strength, and is therefore invoked in times of danger or exertion, and by women also who desire the blessing of children.

Travellers may generally visit the mosque without an attendant, but must not omit to deposit their shoes at the door. During the fair, however, which attracts among other visitors a number of fanatical Mohammedans from countries rarely visited by Europeans, it is advisable to procure the escort of the shêkh of the mosque, to whom an introduction may be obtained through the consular agent (fee 1-2 fr.).

The catafalque of the saint is covered with red velvet richly adorned with embroidery, and is enclosed by a handsome bronze railing. The dome is still unfinished. One large and two small schools are connected with the mosque. The sebîl, or tank, with the small medreseh (school) above $i t$, situated in the space adjoining the mosque, is older.

The most important of the three annual Fairs of Tantsa is that of the 'môlid' (nativity) of the saint in August. The other' two fairs are in January and April. Each fair lasts from one Friday to the following, presenting an interesting and picturesque scene, but too often marred by the licentiousness so prevalent among Orientals. In August upwards of half-a-million persons congregate here from all the Eastern countries bordering on the Mediterranean, and from the Mohammedan part of Africa. The streets are lined with booths and stalls, as at European fairs; and a number of European merchants are also to be met with. Beggars and pilgrims farther contribute to swell these vast crowds, and the merchants themselves usually combine a pious visit to the shrine of the saint with their commercial business. In August and April we also encounter here the greater number of the Ghawâzi and 'Awâlim (comp. p. xxvi), of the singing and dancing and unveiled women, and of the jugglers and showmen of every kind who dwell on the banks of the Nile. Dervishes with dishevelled hair and ragged clothes, cripples, and idiots, who are treated with great respect, are clamorous for bakshîsh; and pilgrims returning from Mecca are saluted with flags and symbols at the gate of the mosque. On the first Friday of each fair the vast concourse of visitors, headed by the chief authorities of the town, move in procession towards the mosque of the sainted Seyyid. In the large space set apart for shows, adjoining the horse-market, the jesters usually attract a numerous audience. When they pronounce the name of Allâh the whole of the assemblage seated around bow their heads with one accord. The gestures of terror and astonishment made by the children and uegroes at the performances of the jugglers are very amusing. Among the most popular exhibitions are those of the obscene Karagyûz, the coarse 'Ali Kâka, and the dances performed by men in female dress (comp. p. xxvi). The fair of Tanta may indeed almost be regarded as a modern reflex of the pilgrimage to Bubastis (p. 192) described by Herodotus.

From Tanṭa to Mahallet Rah, Mansara, and Damietta, see p. 221.
A short branch-line runs from Tanta to the S. to Shibin el-Kom, a small town ou this side of the Rosetta branch of the Nile, and to $(251 / 2 \mathrm{M}$.) Mendf, the central point of the Menafiyeh, one of the most fertile regions in the Delta.

Beyond Tanta the train traverses a fertile tract, and before ( 87 M .) Birket es-Sab $a$ crosses a small arm of the Nile. A number of cotton-cleaning mills afford an indication of the wealth of the country. A little farther on, near Benha, on the Damietta arm of the Nile, is a large viceregal palace, where Abbâs Pasha (p.cxxix),

Saîd Pasha's predecessor, was murdered in 1854. The train crosses the Damietta branch of the Nile.

101 M . Benha (reached from Alexandria in $23 / 4 \mathrm{hrs}$., from Cairo in $3 / 4 \mathrm{hr}$.; railway to Zakâzîk and the Suez Canal, see p. 191), or Benhael-'Asal, i.e. 'Benha of the honey', is famous for its red oranges and mandarins, which are much esteemed at Cairo. Excellent grapes are also produced here.

To the N.E. of Benha, not far from the town, and intersected by the railway, are the insignificant ruins of the ancient Athribis, the 'heartcity" of antiquity, situated in the 10th Nomos of Lower Egypt, and named Kom el-Atrîb and Atrib or Etrîb. Athribis was founded under the Pharaohs, and appears to have enjoyed its maximum importance in the Greco-Roman period of Egyptian history. H. Brugsch explored the necropolis in 1854.

Near ( 109 M .) Tukk the mountains enclosing the Nile higher up become visible in the distance, those on the E. (Arabian) side appearing lower than those on the W. (Libyan) side. About 5 min . later the outlines of the pyramids begin to loom in the distance on the right, and near Kalyûb they become distinctly visible.
$1201 / 2$ M. Kalyab is the junction of a branch-line to Zalcazik (p. 191) and of another to the ( $51 / 2$ M.) Barrage du Nil.

The Brance Railway to the Barrage is traversed by four trains daily from Cairo ( 15 M ., in $45-55 \mathrm{~min}$.; fare 12 or 6 pias., return, 18 or 9 pias.). Other trains to Kalyûb have no through-connection to the terminus-station Barrage, $51 / 2 \mathrm{M}$. from Kalyûb. Opposite the station is a tavern kept by a Greek, where luncheon may be obtained if required (p. 34). Donkeys may be hired at the station. - A narrow-gange line, worked by hand-power, unites Barrage with the West Nile Railway (p. 24).

The object of the *Barrage du Nil (Arab. el- Anatior el-Khêrîya), the largest weir in the world, is to keep the water of the Nile at the same level in all seasons, so as to obviate the necessity for the old irrigation machinery, with its great expenditare of labour; and to remove the difficulties of navigation below this point, dnring the three months when the Nile is at its lowest. The work was begun under Mohammed 'Ali, about 1835. Linant-Bey proposed to alter the conrse of the river and to build a weir at a point farther to the N., where the configuration of the ground appeared more favourable; but his plan was found too costly and was rejected in favour of one proposed by a French engineer named Mougel-Bey. The cost of establishing foundations in the shifting soil of the Delta, however, far exceeded the estimates; and, after all, the erection was found to be too insecure for its intended purpose. For nearly twenty years (1847-1865) the Barrage lay useless, as a costly failure; but in 1885-90 Sir Colin Scott-Moncrieff successfully completed it at a cost of 500,0001 ., so that now a uniform depth of water of about 3 ft . can be maintained.

Nearest the station is the Weir on the E. (Damietta) Branch of the Nile (a few copper coins as pontage are expected on passing through the gates at the ends of the bridge). This lock and weir is over 500 yds . in length, and has 68 vertical iron sluices. From the farther end a pretty avenue of lebbek trees leads across the isthmus (about $1 / 2 \mathrm{M}$. wide) between the arms, in the middle of which is the Menofiyeh Canal, constructed both for irrigation and for communication with the district of Menofiyeh. The Weir on the W. (Rosetta) Branch of the Nile is about 450 yds . across and has 58 vertical iron sluices. The navigation of the river is carried on by means of spacious basins and locks, fitted with swing-bridges, at either end of the two weirs and also on the Menuffiyeh Canal. The superstructures of the works are built in an effective Norman castellated style. A junction-canal above the weirs connects the two branches of the Nile, and is used to regulate the depth of water in each. When the river is low, the W. branch receives all its water through this canal.


The fortifications seen from the bridge were erected in $1854-63$ by Sa'id Pasha, but are now of no importance. A number of storehouses and workshops stand on the isthmus between the branches of the Nile, and a workman's village has sprung up at either end of the Barrage.

The Libyan chain becomes more distinctly visible, and we also observe the Mokattam range with the citadel, and the mosque of Mohammed 'Ali with its slender minarets. The scenery now becomes more pleasing. Gardens and villas come in sight. To the left lie the site of the ruins of Heliopolis (the obelisk of which is not seen from the railway), Matarîyeh with its sycamores, Kubbeh, the usual residence of the Khedive, and the large barracks of 'Abbâsîyeh, while on the right we perceive the beautiful avenue leading to Shubra (p. 92). The environs of the city become more and more prominent. About $3 / 4 \mathrm{hr}$. after leaving Benha the train enters the principal station of ( 130 M.) Cairo.

## 4. Cairo.

Plan of Cairo. The European names of the streets used formerly to be written up in French only, so far as they were written up at all; but since the British occupation the Arabian names have been used, transliterated on a careless and unscholarly system (comp. p. cciii). Our plan follows this transliteration in general, correcting, however, the more obvious defects (e.g. the English ' $e e$ ' is represented, as in the text, by ' $i$ '). Some of the French names have been retained.
a. Railway Stations. Hotels and Pensions. Restaurants and Cafés.

Railway Stations (comp. p. xviii), all except one to the N. of the town, the two chief stations heing beyond the Isma'ilîyeh Canal, here crossed by the Kanṭaret el-Lîmûn. - 1. Principal Station (Pl. B, 1), rebailt in 1893-94, for Alexandria (R.3), Ismaitilya, and Suez (R. 13), and for the whole of the Delta. - 2. Zabtîyeh Station (Pl. A, B, 1), separated from the preceding by the Shuhra Avenue and entered from the Zabtîyeh Street, for Bedrashên (Sakkara), the Fayum, and Opper Egypt, and for Tell elBârad (p. 24). - 3. ©Abbảsîyeh Station, on the other side of the Isma‘îlîyeh Canal, for 'Abbâsîyeh, Kubbeh, Matarîyeh (Heliopolis), and el-Merg. - 4. Helwan Station (PI. B, 5), in the S. part of the town, for Helwan.

The hotel-commissionnaires with their omnibuses or carriages, and Cook's and Gaze's agents await the arrival of the fast trains and take charge of luggage. Small baggage may also be entrusted to the Arab porters, with numbered metal tickets on their arms, who will conduct the traveller to the hotel-omnibus or procure a cab for him (tariff, see p. 30). Heavy luggage is sent on to the hotel in special vehicles, safely hut not too promptly.

Hotels (see remark at p. 5). As it not unfrequentry happens that all the hotels are full, especially in Feb, and March, it is a wise precaution to telegraph for rooms from Alexandria or Port Saiîd. -"Shepheard's Hotel (Pl. B, 3), Shâría Kâmel Pasha, a luxurious new building, with a large terrace overlooking a busy street, pens. 80 pias., patronised hy English and American travellers. - *Hôtel Continental (Pl. B, 3), Shâri'a Kasr en-Nil, in a quiet situation in the new quarter of Ismầlîya, newly added to and pleasantly fitted up, with terrace, gardens, and separate suites for families, fashionable, pens. 80 pias. - *New Hotel (Pl. B, 3), opposite the Ezbekîyeh garden, with terrace, also in a husy neighbourhood, pens. from Dec. to March 16 s . ( 80 pias.), at other seasons 60 pias. ${ }^{*}$ Hôtel dư Nil (Pl. D, 3), in a narrow street off the Muski (p. 47), recently rebuilt, with a pleasant garden, terrace, and belvedere, good cuisine, pens. from Jan. to March 16 fr. ( 64 pias.), at other seasons 15 fr. - *Hôtel d'Angleterre (Pl, B, 3; same proprietor as Hôtel Continental), Shâría
el-Magbrabi, in the suburb of Isma'îlîya, new, pens. 60-80 pias. - *Hôtel Royal (Pl. B, 2), Shâri'a Wagh el-Birkeh, beside the Ezbekîyeh Garden, pens. 15 fr ., good cuisine. - Hôtel Metropole, to the S . of the Ezbekîyeh, pens. 10 s . ( $121 / 2$ fr.). - Hôtel Bristol (Pl. C, 2), Hôtel Khedivial (Pl. C, 2, 3), both in the Mêdân el-Kbaznedâr, to the N. E. of the Ezbekîyeh Garden, moderate charges. - *Hôtrl Viria Victoria (Pl. B, 3), Sbâría elManakh 14, well situated near the Place de l'Opéra (p. 46), pens. 15 fr. ( 60 pias.), 400 fr. per month. - Outside the Town: *Gezíreh Palace Hotel, in the former viceregal palace of tbat name (p.91), a huge and sumptuously fitted up house, with 250 rooms, electric light, ballroom and theatre, and large gardens, pens. from 13s. per day (special service of four-horse drags every $1 / 2 \mathrm{hr}$. from the Ezbekîyeh, running to Bûlâk in connection with the hotel steamferry-boat, when the Nile bridge is closed). - "Mens House Hotel near the Pyramids of Gizeh (Mena Coach from Cook's Office daily at $11.45 \mathrm{a} . \mathrm{m}$., see p.133), an extensive establishment, with various 'dépendances', swimming and other batbs, stables, riding-course, etc. (physician in residence), pens. $70-80$ pias., for a stay of several months $60-70$ pias. according to room, special terms for invalids, servants 40 pias.

Pensions. Pens. Sima, Shâri'a el-Maghrabi (Pl. B, 3); Mme. Finck, Sbâri'a Kassr en-Nîl 17, in the Isma'îlîya suburb, pens. 9 fr., well spoken ot; Mmé. König, Maison Zogluh, between the Place de l'Opéra and the Rue Abdîn, well spoken of: Pens. Suisse, next tbe Hôtel Royal, pens. 8 fr ., well spoken of ; Pens. Haggenmacher, Pens. Tewfik, and others.

Private Apartments are seldom to be secured for a shorter period than six months, so that an arrangement at a pension or at one of tbe less expensive hotels will frequently be found almost as cheap. Information as to rooms may be obtained at the chief shops or from agents whose addresses may be best learned at the consulates. A snnny aspect should be chosen, and a detailed written contract invariably drawn up. A bargain as to food may be made with some neighbouring restaurant; for only those conversant with the language should attempt to keep house for themselves with native servants.

Restaurants. *Santi, in the garden of the Ezbekîyeh, déj. 3, D. $31 / 2 \mathrm{fr}$., full board for a month $130-180 \mathrm{fr} . ;{ }^{*}$ New Bar, Place de l'Opéra; "Splendid Bar, Café Kovats, near Sbepheard's Hotel.

Beer (Munich and Austrian beer). New Bar, Splendid Bar, see above; August Gorff, Shârica Wagh el-Birkeh (also rooms; pens. 8-10 fr.); Bavaria (Schüller), on the E. side of the Mêdân Kantaret ed-Dikkeh (P1. B, 2); Böhr, Shâri'a el-Bahri, near the N. entrance to the Ezbekîyeh Garden.

Cafés in the European style abound in the neighbourhood of the Ezbekîyeh, and in the W. part of the garden near the music-pavilion, and in the grottoes. Beer and other beverages are obtained at these establishments. None of them are suitable for ladies, and many of tbem have gaming-tables in separate rooms. - Cafes Chantants (for gentlemen only): Grand Cafe Egyptien, opposite Shepheard's Hotel, with female orchestra; Groand Eldorado, Shâría Wagh el-Birkeh, with stage and Egyptian singers and dancers. - The Arabian Cafés (p. xxiii), of which there are upwards of a thousand at Cairo, are small and dirty, and hardly worth visiting. Coffee in the Arabian style is easily obtained elsewhere. - Bodega in the Hôtel Royal. - Confectioner, Gyss, Place de l'Opéra, etc.
b. Consuls. Police. Banks. Post \& Telegraph Offices. Tourist Agents. Consulates (comp. p. xx). Britisn, Lord Cromer, consul-general, in the new quarter on the Nile (Pl. A, 5) ; Mr. Raphael Borg, consul, Shârifa el-Maghrabi, corner of the Shârifa el-Madâbereh. - United States, Shârifa el-Maghrabi 4, Mr. F. C. Penfield, consul-general; Mr. L Mitchell, viceconsul. - Aostrian, Shâri'a Mast el-‘Atîka 66, Baron von Heidler-Egeregg, consul-general; Ritter von Gorachuchi, consul, near Shepheard's Hotel (Pl. B, 3). - Belgian, M. Maaskens, consul-general, Shâría el-Kentseh el-Gedideh 6 (Ismarîlîya); M. Georges $A$. Eid, Mêdân Kanṭaret ed-Dikkeh. Danish, Shâría Bâb el-Hadîd $4, \mathrm{Hr}$. Schütz, vicé-consul (consul-general at Alexandria). - Dutcr, Hr. Fan der Does de Villebois, consul-general,

Shâri'a Maşr el-‘Atîka 56; Hr. Brelschneider, consul, Rue de l'Eglise Catholique du Muski. - Frenca, M. Cogordan, consul-general, Shảri'a elMadâbegh 6; M. Girard, consul, Shârifa Masr el-fitîka 39. - German, Baron von Heyking, consul-general, Gezireh Palace Hotel ; Hr. von Wichert, consul, Shâría el-Manâkh. - Greex, Shâría el-Maghrabi 30, M. Skotidis, consul. Italian, Sig. Pansa, cousul-general, Shârifa el-Manâkh 13; Count Francesco Mazza, consul, Shâría Kaṣr en-Nîl 24. - Portoguese, consulate vacant, represented by the Italian consul (consul-general in Alexandria). - Rossian, Shâri'a 'Imâd ed-Dîn 16, M. Koyander, consul-general; M. Ivanoff, consul. - Spanish, Shârifa Kaşr en-Nîl 34, Señ. Otal, consul-general; Hr. W. Pelizaeus, vice-consul.

Police (Zabtîyeh, Pl. C, 3), an admirably organized force, consists of about 300 officials, including a number of Europeans (chiefly Italians), who are very obliging to strangers, and preside so effectively over the public safety that the traveller may explore the remotest and dirtiest purlieus of the city without fear. Complaints against the police should be lodged with the complainant's consul.

Bankers (comp. p. xiv). Crédit Lyonnais (Pl. C, 3), Shâri'a el-Bawâki, the first side-street to the E. of the Ezbekîyeh, with a branch at the RondPoint du Muski (Pl. D, 3) ; Bank of Egypt, Shấría Kaṣr en-Nîl 28 ; Banque Impériale Ottomane (Pl. B, 3), Shâri‘a el-Maghrabi 27; Anglo-Egyptian Bank, Shâri'a Kasr en-Nîl 29; Crédil Foncier Egyptien, Shârica 'Imâd ed-Dîn 8; Thos. Cook \& Son, H. Gaze de Sons (see below). - Money Changers (comp. p. xvi). The traveller is cautioned against dealing with any of the nnmerous money-changers in the streets. The necessary small change can always be obtained from the hotel-portier, or in making purchases in the shops.

Post Office (Pl. C, 3; p. 46), next the police-office, at the corner of the Shâri'a Tâhir and the Shârifa el-Baidak, is open from $7.30 \mathrm{a} . \mathrm{m}$. to $9.30 \mathrm{p} . \mathrm{m}$. The office in the gallery of the inner court, for more important business, is open from $9 \mathrm{a} . \mathrm{m}$. till $6.30 \mathrm{p} . \mathrm{m}$. (with a short interruption about $12.30 \mathrm{p} . \mathrm{m}$. ), and again from 9.15 to $9.30 \mathrm{p} . \mathrm{m}$. to snit the night-express to Isma'ilinga. Lists of the mails by steamer to Europe, etc., are exhibited daily in the vestibule. The arrival of Registered Lettej's, etc., is intimated to the addressee by a notice, which must be produced, bearing the stamp of the hotel, when the letters are applied for. There are letter-boxes at the hotels, cleared at the hours marked upon them.

Telegraph Offices. Eastern Telegraph Co. (Pl. B, 3; British), corner of the Shâri'a 'Imâd ed-Dîn and the Shâri'a el-Manâkh, a few yards from the Place de l'Opéra. - Egyptian Telegraph (Pl. B, 3), Route de Bûlâk.

Tourist Agents. Thos. Cook. \& Son (Egypi) Ltd., Shârifa Kâmel Pasha 6, to the $\mathrm{N}^{2}$ of Shepheard's Hotel. Tevofikieh (Société Anonyme de Navigation, etc.), represented by $H$. Gaze \& Sons, nnder the colonnades opposite Shepheard's Hotel, - Jean Sfer \& Co., to the S. of Shepheard's Hotel (steamboat excursions to Sakkâra twice weekly, 18s.; to the Barrage du Nil by carriage and rail daily by steambeat twice weekly, 2is.). Austrian Lloyd, Shâri'a Kaşr en-Nîl 22. - Navigazione Generale 1taliana, in a side-street off the Place de l'Opéra, near the New Bar (p. 28). Farther information, especially as to the departure of steamers, in the notice-frames at Cook's Office, the Hôtel du Nil, etc.

## c. Cabs. Donkeys, Commissionnaires. Dragomans.

Cabs, generally good victorias, with two horses, are always abundant in the quarters near the Ezbekîyeh. Closed cabs (landaus) are usually to be obtained only on special order and at higher fares. The wheeled traffic in Cairo, especially in the newer quarters, is almost as great as in the large European cities. The cabs usually drive rapidly, so that their use saves time and strength. The official tariff (p. 30) is practically disregarded, and the hirer should make a special bargain in every case, especially for drives of any length which may possibly reach points not adequately provided for in the tariff. Few of the drivers either understand any European language or are able to read the names of the streets, while many of them know the various points only by names of their own.

But Arabs with a smattering of European languages are usually to be found either among the employés of the hotel or standing about near the entrance, and one of these may be employed as interpreter (though offers of farther service should be firmly declined). The intervention of a middleman is quite in accordance with Oriental ideas of bargaining, and the traveller will usually find it easy enongh to secure the acceptance of a reasonable offer based on the tariff, or even below tariff-prices, especially if he calmly show signs of taking his custom elsewhere. If the driver be dissatisfied with his fare on the conclusion of the drive, the services of a middleman may again be invoked, and in obstinate cases the hotel-portier may be applied to. A boy (Sais) usually hangs on behind the cab, and should be permitted to remain, as he can be of considerable service to the driver, and sometimes even shows him the way. The traveller shonld keep his eye on the direction taken by the cab, as sometimes the driver drives straight ahead in complete ignorance of the way, and requires to be gnided, e.g., by being touched with a stick on the right or left arm according to the turnings.

Cab Tariff for $1-3$ pers. (each pers. extra 1 pias. and each piece of luggage beside the driver, 1 pias.).

1. Per Drive (Arab. Tausila), within a radins, of 1,2 , or 3 M . from the General Post Office (Pl. C, 3; p. 46), 3, 4, or 5 pias., stoppage of $1 / 4 \mathrm{hr}$. free, more than $1 / 4 \mathrm{hr}$. 2 pias. - As a general rnle, a short drive cannot be had for less than abont $21 / 2$ pias., other drives $3-4$ pias.
2. By Time (Arab. Bis-sáf $a$ ): $a$. On ordinary days, per hr. or less 6 pias., at night ( 10 p.m. to 6 a.m.) 9 pias.; each additional $1 / 4 \mathrm{hr} .2$ pias.
b. On Frid. and Sun. : after 4 p.m. and at night, 10 pias. per hr.
c. Per day, within a radins of 3 M . from the General Post Office, 60 pias.
3. Longer Drives.

Qezî'eh
Shubra
6 pias.
Shubra el- Ain (bowling
Fum el-Khalig ${ }^{\text {D. }}$ (Island of Roda) Old Cairo
Tombs of the Khalifs ....
Matariyeh (Heliopolis) ..
Pyramids of Gîzeh .... 50
Museum at Gîzeh ..... 10

There and back.
20 pias. incl. halt of 1 hr .

15 - - - - 1 -

| 15 | - | - |  | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 20 | - |  | - | - | 1 |
| 25 | - |  |  |  |  |
| 40 | - | - |  |  | 3 |
| 77 | - | - |  |  |  |
| 77 |  | - |  | - | 4 |
| 25 | - | - | - | - | - |

Bakshîsh, 5-10 per cent of the fare. - Complaints, with the nnmber of the cab and the time should be lodged at the police-office (p. 29); but as a general rule the mere mention of the dreaded police is sufficient to reduce the drivers to reason.

Omnibuses ply from behind the Palais de Justice (p. 46) in various directions, but they are dirty and seldom used by foreigners.

Donkeys (comp. p. xviii), per short ride in the city 1-2, per hr. 3-4 pias., half-a-day, 8-12, for a day's excursion 15-25 pias. As at Alexandria, donkeys are becoming less and less fashionable in Cairo; but they are still indispensable for those who wish to study Oriental life in the narrow streets of the Arabian quarters, with their bazaars and mosques. For visits to the Tombs of the Khalitis and the Mamelukes, to the view-points on the Windmill Hill and the Mokattam Hill, and similar excursions, donkeys offer this advantage over cabs, that they can go everywhere, while the bridle-paths are much less dusty than the carriage-roads. These animals are to be found in great numbers at all the most frequented points; at night in front of the cafés; and the stranger who wishes to hire a donkey is sometimes well-nigh overwhelmed by the charge of light cavalry to meet his wishes. The donkey-boys of Cairo (preferable to older drivers) often possess a considerable fund of humour, and their good spirits react upon their donkeys. The traveller should sternly repress the first symptom of the usual cruel goading of the animals to quicken their pace.

Galloping is forbidden within the town. The bakshîsh should be proportionate to the quality of the donkey and the behaviour of the donkey-boy.

Commissionnaires (comp. p. xxi). Only travellers who are pressed for time require a cicerone. The best guides ( $5-8$ fr. per day) are to be had at the hotels. They often try to induce their employers to engage them for distant tours, such as that to Mt. Sinai, or the voyage up the Nile, but for such expeditions they are totally nnfitted. As a rule, purchases should never be made in their presence. If, however, the traveller knows a few words of Arabic, and is not in a hurry, he will soon find his way through every part of the city and the environs with the aid of his donkey-boy alone.

Dragomans (comp. p. xxi) are necessary for long expeditions. Information as to trustworthy dragomans may be obtained at the traveller's consulate or at the hotels.

## d. Physicians. Chemists. Hospitals. Baths. Hairdressers.

Physicians. English: Dr. W. Davis; Dr. Grant-Bey; Dr. Keating; Dr. Milton; Dr. Murison; Dr. Sanduith. German: Dr. Hess-Bey; Dr. Wildt; $D r$. von Becker; $D r$. Comanos-Pasha, a Greek, who has studied in Germany ; Dr. Engel-Bey; Dr. Ambron. - Oculists: Dr. Simons; Dr. K. Scott (English); Dr. von Herff. - Aurist: Dr. von Hebentanz. - Dentists: Mr. Waller, English; Mr. Elsner, Mr. Warnekross, both Americans. - The addresses may be obtained at the hotels and at Diemer's.

Chemists (high charges). German-English Dispensary, opposite the Crédit Lyonnais (p. 29) ; English Dispensary, Pharmacie Anglo-Americaine (Mandofia), both in the Place de l'Opéra; Myrialaki, in the Hâlim Buildings, near Shepheard's Hotel. Tourist Dispensary in Shepheard's Hotel.

Hospitals. Geıman and English Victoria Hospital, Shâría Dêr el-Benât (Pl. A, 3), well fitted up, and managed by German Deaconesses, under the superintendence of Dr. Wildt. - The Ew opean Hospital (physician, Dr. Desirello-Bey), in the 'Abbâsîyeh, is admirably fitted up, and under the supervision of the consuls. The patients are attended by sisters of mercy. The charges are 6-12 fr. per day, poor patients at lower rates. -- The Austrian Hospital, in the 'Abbâsîyeh, is managed by Dr. von Becker. - The large Kas. el-‘Ain (Pl. 28; G, 6), a hospital with a school of medicine, lies on the Nile, on the route to Old Cairo (p. 83).

Baths (comp. p. xxvii). European Baths at the hotels, and in the new bath-house (also hydropathic, etc.) in the Hâlim Buildings, near Shepheard's Hotel (Pl, B, 3). The best of the numerons Arabian Baths are those near the Bâb esh-shâriyeh (Pl. D, 2) and at Bûlâk.

Hairdressers in the European style abound in the frequented quarters of the town. Their charges are usually exorbitant. - Arabian Barbers (not for Europeans), see p. 42.

## e. Shops.

Booksellers and Stationers. Diemer (Librairie Internationale), at Shepheard's Hotel (publisher of the Visitors' List; large stock of Arabic books). The Tourist (Livadas), opposite Shepheard's; Librairie Centrale (Barbier), next the Hôtel Khédivial ; G. G. Zacharia. - British \& Foreign Bible Nociety, Shâri'a Mohammed-'Ali. - Stationery, visiting cards, etc.: Hohl \& Co., in the Muski; Boehme \& Anderer, in the Ezbekîyeh, etc. - Arabian Book-sellers, see p. 49.

Photographs. Heymann, Shâri'a Bâb el-Hadîd (Pl. B, 2) ; Helios, Lekegian, Shâría Kâmel Pasha, near Shepheard's Hotel; Diemer (see above), etc. - E. Brugsch-Bey, the keeper of the Gizeh Museum (p. 94), has caused a number of the objects in the museum to be photographed. This collection, which costs 25 fr. (small size 15 fr .), may be purchased at the museum and at Diemer's (see above).

European Wares. All the ordinary wants of the traveller may now be supplied at Cairo. Clothing, shoes, etc., chiefly for the use of travellers, are sold by Pascal dc Co., in the Ezbekîyeh, Mayer, Stein, in the Muski, and the Cordonnerie Française, in the Ezbekîyeh. Ladies' requirements are sold by Cécile and others in the Ezbekîyeh. Good watchmakers and
goldsmiths are Buys-Badollet and Centonze, both opposite Shepheard's; Lattes, Muski. Rifles and ammunition, etc., may be obtained at Bajocchi's, in the Ezbekîyeh. These shops are not mentioned to the exclusion of many others equally good, but merely to give the traveller an idea of where to look for shops to suit him. As a rule the shops in the E. of the Ezbekîyeh and the Muski are cheaper than those farther to the W., in the Shâri'a Kâmel Pasha; but the goods in the latter (fixed prices) are usually more modern and tasteful.

Wine, Preserved Meats, etc., are sold by Walker \& Co., in the Ezbekîyeh; Niccolo Zigada, Monferrato, and Dracatos, all near Shepheard's Hotel; E. J. Fleurent, Shârica el-Bawaki (Crédit Lyonnais), etc.

Tobacco (comp. p. xxxi). Syrian tobacco (Korâni and Gebeli) is sold at a shop in the Gâmi'a el-Benât (p. 61), near the Muski, but had better be purchased in small quantities only. Turkish tobacco (Stambûli) and cigarettes are sold by Nestor Gianaclis, in the Muski, by Voltera Freres, and by Cortessi, in the Ezbekîyeh, and by Melachrino, Shârifa el-Maghrabi 33. - Cigars at Flick's (Havana House), near the New Hotel.

Arabian Bazaars, see pp. 43, 47. The most important for purchases is the Khan el-Khalil (p. 4y). But strangers are to be dissuaded from making purchases in these bazaars. Many so-called Oriental articles are manufactured in Europe and are to be obtained at home equally genuine and much cheaper. The prices demanded by the dealers for 'antiques' (frequently hawked in the hotels) are absurd, though unfortunately many travellers are foolish enough to pay them, in spite of the notorious fact that most of the articles are forgeries. A special permit is required by law for the export of antiquities. Comp. p. xvii.

Arabian Woodwork is sold by *G. Parvis, an Italian, on the left side of a court near the entrance to the Muski. Strangers should not fail to visit his interesting workshop, which they may do without making any purchase.

Goods Agents. Those who make purchases in Egypt to any considerable extent are recommended to send them home through the medium of a goods-agent (e.g. Furino, Hatoun, Ces. Luzzatto), in order to avoid customhouse examinations, porterage, and various other items of expense anp annoyance. The post-office forwards parcels not exceeding 5 kilogrammes ( 11 llbs. ) in weight for 3 fr . ( 12 pias.), with export duty of 1 per cent.

## f. Theatres. Clubs. Churches. Schools.

Theatres. Viceregal Opera-House (Pl. C, 3; p. 46); in the latter half of the winter season a French opera company usually performs at this theatre, the arrangement and prices of which resemble those of Italian theatres. Box-office open $8-12$ and $2-5$; boxes dear (evening dress compulsory; closed boxes for Moslem ladies). - Summer Theatre (Italian), in the Ezbekîyeh Garden.

Clubs. The Geographical Society (Pl. C, 3), founded by Dr. Schweinfurth, the celebrated African traveller, possesses an extensive library and a reading-room, which are open to visitors at certain hours. - The club Khédivial (Pl. C, 5), in the Isma'îlîya quarter, and the Turf Club, in the Shâri'a el-Maghrabi, are fitted up in the English style. Strangers are not admitted without difficulty.

Churches. English Church (All Saints'; Pl. B, 3), Route de Balâk, in the Isma'îlîya quarter. - American Service in the American Mission (Pl. C, 3), near Shepheard's Hotel. - German Protestant Church (Pl. B, 33), in the Isma'îlîya quarter; German service, French on the last Sun. in the month. - Roman Catholic Church (Pl. D, 3), in a street off the Muski. Convento Grande di Terra Santa, with 18 chaplains of different nationalities. Jesuit Church, in the Rosetti Garden. Franciscan Church, near the Boul. Clot Bey. Church of the Mission of Central Africa. - Orthodox Greek Church (Pl. D, 2, 3), in the Hamzâwi (p. 48). - Coptic Catholic Church (Pl. D, 3), at the back of the Roman Catholic Chnrch; Coptic Jacobite Church (Pl. C, 2), in a side-street between the Boulevard Clot Bey and the Erbekîyeh. These two sects have, in all, 32 churches at Cairo. The Jews here are of two sects, the Talmudists and the Karaites, the
former being by far the more numerous. They possess 13 synagogues, most of which are situated in the Jewish quarter (Derb el-Yahûdi; P1. D, 3).

Schools. The German School is largely patronised by all nationalities and sects. - The School of the American Mission (Pl. C, 3) has its sphere of operations chiefly among the Copts. - The Anglican Mission School is presided over by Miss Whateley. - Besides these, there are an École Gratuite, an École des Soeurs du Sacré Coeurr, a Pensionnat des Soeurs du Bon Pasteur, a Collège de la Ste. Famille (school of the Jesuits), and an Ecole des Freves. - Permission to visit the Egyptian schools may be obtained at the Ministry of Education in the Derb el-Gamâmîz (p. 59). - Arabic Teacher, 'Ali Effendi Bahgat (chief interpreter), at the Ministry of Education, Palais Derb el-Gamâmîz (p. 59).

## g. Sights and Disposition of Time.

By carefully preparing a plan beforehand, starting early every morning, and making a free use of cabs, the energetic traveller may succeed in visiting all the chief objects of interest at Cairo in seven or eight days, but it need hardly be said that a satisfactory insight into Oriental life can not be ohtained without a stay of several weeks. The following itinerary will be found satisfactory on the whole, though those who use donkeys instead of cabs will perhaps consider several of the days somewhat too fat iguing. - Special permission is necessary for a visit to the Arabian mosques and other monuments, the restoration of which has been taken in hand within the last ten years by a Comité de Conserva'ion des Monuments de l'Art Arabe, and for the Arabian Museum of Art. Tickets (2 pias. each) are obtained at the Wakf (Office for the management of secularized mosqueproperty; Pl. D, 6; closed on Frid.) and at Diemer's bookshop (p. 31). A fee of $1 / 2-1$ pias. is also expected by the attendants at the entrances to the mosques, for supplying slippers.

1st Dar. Forenoon: Tour of inspection in the immediate neighbourhood of the Ezbekîyeh (p. 45) and in the Ezbekîyeh Garden; then on foot or donkey-back to the Muski and the Bazaars (pp. 47-50). - Afternoon (by cab or on donkey-back): to the Tombs of the Khalifs ( $p .76$ ) and the *Citadel, with the mosque of Mohammed 'Ali (*View of Cairo; pp. 53-55), returning viâ the Place Sulṭân Hasàn and the Boulevard Méhémet-Ali (p.51).
$2_{\text {nd }}$ Daf. Forenoon (cab or donkey) : Mosques of Sultan Hasan (p. 52) $^{2}$ and $1 b n$ Tuldn (p. 56); Bab ez-Zuwëleh (p. 61); mosque of ${ }^{\text {C }}$ El-Muaiyad (p. 62); street and mosque of El-Ghari (p.63). - Aflernoon: by railway (or drive on the 'Abbâsîyeh road viâ Kubbeh) to Mataríyeh and * Heliopolis (pp. 127, 128).

3Rd Day. Forenoon (on donkey-back) : Muristán Kalaún (p. 69); tombmosque of the sultan Mohammed en-Nasîr ibn Kalần (p. 70); Barkukiyeh (p.70); Gami"a el-Hakim with the *Arabian Museim (pp. 72, 73) ; Bab en-Naṣr (p. 72). - Afternoon (on Frid. only, starting at 1 p.m.; by carriage): Kasr el- Ain (Howling Dervisbes, p. 47); then across the Nile Bridge (p. 91); closed from 1 to $2.30 \mathrm{p} . \mathrm{m}$.) to Gezâreh (p. 91).

4tr Day. Forenoon: "Museum of Gîzeh (p. 94; closed on Mon.; several visits advisable; note that the Nile Bridge is closed from 1 to 2.30 p.m.). - Afternoon (on donkey-back) : Ascent of the "Mokattam (view of Cairo by sunset). Those who take the less common excursion to the Spring af Moses and the smaller Petrified Forest (p. 131), returning by the Mokattam, must start early, in winter.

5th Day. Forenoon: Mosques of ${ }^{*} \mathrm{El}$ - Azhar (p. 63) and Hasanein (p. 67). The mosque of El-Azhar should not be visited on a Friday, as there is no teaching on that day, and the traveller would thus miss one of the chief attractions. Spare time may be spent in the Bazsars (p. 43). - Afternoon (by carriage): Island of R6da (p. 82) and Old Cairo (p. 83), with the Coptic church of Abu Sergeh ( p .83 ) and the mosque of Amrus (p. 87); also, if time permit, the Imam Shafferi, Hosh el-Pdsha (p. 80), and the Tombs of the Mamelukes, after which we return by the Place Méhémet-Ali (p. 53).

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6th Day (by carriage): *Pyramids of Gizeh (p. 133; which may be seen in the course of a forenoon, if necessary); a visit to Shubra, which may be added in the afternoon by those provided with a permit, is scarcely worth while.

7th Day (by railway and on donkey-back; luncheon should be provided): Memphis and *Sakkara (pp. 160, 164). Expeditious travellers may find time on the return-journey to cross the Nile by a felûkeh or dahabiyeh, ride to Helwân (p. 188), and thence take the train back to Cairo.

8th Day: Barrage du Nil (p. 26), either by railway (from the Principal Station; luncheon should be taken), or (preferable) by Cook's steamer, which plies once a fortnight (enquire at the hotel; luncheon included in the fare).

The following places deserve repeated visits: - the Museum at Gizeh; the Citadel, or the Windmill Hill, for the sake of the view; the Tombs of the Khalt̂fs; the Ezbekîyeh Garden; the Bazaajs (and street-traffic), on a Thursday.

Cairo, Kahira, or Masr el-Kahira ('Maṣr the victorious', Maṣr being the ancient Semitic name for Egypt), or simply Masr or Misr, is situated in $30^{\circ} 6^{\prime} \mathrm{N}$. latitude, and $31^{\circ} 26^{\prime} \mathrm{E}$. longitude, on the right bank of the Nile, about 9 M . to the S . of the socalled 'cow's belly', the point where the stream divides into the Rosetta and Damietta arms, and has not inaptly been styled 'the diamond stud on the handle of the fan of the Delta'. On the E. side of the city, which covers an area of about 11 square miles, rise the barren, reddish cliffs of the Mokattam Hills (p. 129), about 650 ft . in height, which form the commencement of the eastern desert. The city has extended so much towards the west of late years that it now reaches the bank of the river and has entirely absorbed Bûlâk (p. 89), which was formerly its harbour.

Cairo is the largest city in Africa, as well as in the Arabian regions, and is the second city in the Turkish empire. It is the residence of the Khedive, and of the ministers and principal authorities. Owing to the secluded habits of the Mohammedan families, and in consequence of the fact that a large section of the lower classes of the community have no fixed abode, it is a very difficult matter to ascertain the number of the inhabitants with even approximate precision. Judging from the average annual number of births in Egypt and at Cairo, the population of the city may be estimated at 400,000 souls, although at the census of 1882 it was returned as 374,838 only. The number of resident Europeans is about 21,650 , including 7000 Italians, 4200 Greeks, 4000 French, 1200 English, 1600 Austrians, and 1200 Germans. The mass of the population consists of Egypto-Arabian townspeople (p. xlviii), Fellâh settlers (p. xxxix), Copts (p. xlii), Turks (p. lii), and Jews (p. liii), the last of whom number 7000 souls. Besides the natives and the European residents, the traveller will frequently encounter negroes of various races, Northern Africans, Beduins, Syrians, Persians, Indians, and other Oriental settlers. - The British garrison numbers about 3500 men .

History of Cairo. When Egypt was conquered by Cambyses(B:C. 525 ) the Babylonians are said to have founded New Babylon (p.83)
on the site now occupied by Old Cairo, and during the Roman period that city became the headquarters of one of the three legions stationed in Egypt. Remains of the Roman castrum are still preserved here. In A.D. 640 New Babylon was captured by 'Amr ibn el- ${ }^{-}$Asi, the general of Khalîf 'Omar ; and when he started on his victorious progress towards Alexandria, he commanded the tent (fosṭat) he had occupied during the siege to be taken down. As it was discovered, however, that a pigeon had built her nest upon it, 'Amr ordered the tent to be left standing until the young birds should take wing. After the capture of Alexandria, ${ }^{\wedge}$ Amr requested the Khalîf to allow him to take up his residence there, but 'Omar refused to accord permission, as Alexandria appeared to him to be rife with elements of discord, and, moreover, too far distant from the centre of the conquered country to be suitable for its capital. 'Amr accordingly returned to his tent, around which his adherents encamped. A new city thus gradually sprang up, and the name of Fostàt continued to be applied to it in memory of its origin. 'Amr afterwards erected a mosque (p. 87), and he is also said to have begun the construction of the canal (Khalig), which, leaving the Nile opposite the island of Rôda, intersects the town, and is supposed to have been intended to connect the Nile with the Red Sea. The city was considerably extended in the reign of the splendourloving Ahmed ibn Tulan, the founder of the dynasty of the Tulunides, who erected the new quarter of el-Katâ'i ${ }^{i}$, to the S.W. of the present citadel. Among the buildings ascribed to him is the mosque (p. 56) which still bears his name. The town of Fostât was favoured by his successors also, and particularly by his son Khumarûyeh, who erected a palace here. The modern city of Cairo was founded by Gôhar, the general of the Fațimite Khal̂̂f Muirzz, to the N. of el-Katầ' ${ }^{\prime}$ ', as a residence for the Khalîf, and as barracks for the soldiers commanded by him, after the conquest of Egypt in 969 A.D. At the hour when the foundation of the walls was laid, the planet Mars, which the Arabs call Kâhir, or 'the victorious', crossed the meridian of the new city; and Mui'zz accordingly named the place Massr el-Kâhira, or Kâhira. Maṣr, the name of Egypt or of its capital, was also applied to Fostât, which, to distinguish it from Masr el-Kâhira, was now called Masr el-'Atîka (the present Old Cairo). The new town extended rapidly. Bricks were easily made of the Nile mud, the Mokattam hills afforded excellent stone, while the gigantic ruins of the ancient Memphis on the opposite bank of the river were also used as a quarry, as the foundations of the houses still show. In 973 Muizz took up his permanent residence in the new city of Cairo. In 1166 the citadel which still commands the city was erected by Şalâheddîn Yusuf ibn Eiyûb (Saladin) on the slope of the Mokattam hills; and the same sultan caused the whole town, together with the citadel itself, to be enclosed by a wall, 29,000 ells in length. Under his luxurious and extravagant suc-
cessors Cairo was greatly extended and magnificently embellished. According to the Arabian historians, the most enterprising of these sultans was Mohammed en-Nâşir (d. 1341), who constructed numerous handsome edifices both within and without the citadel, as well as canals and roads, thus converting the ruins and sand-hills in the environs into beautiful suburbs, with palaces and pleasuregrounds. At that period, however, Cairo was fearfully devastated by the plague, as it had been on two former occasions (in 1067 and 1295), and was also several times subsequently; and, according to Makrîzi, no fewer than 900,000 (?) persons died in Old and New Cairo between November, 1348, and January, 1349. The town suffered severely in other ways also, and indeed its whole history, so far as recorded, like that of the sultans and the Mamelukes themselves, seems to have presented an almost continuous succesion of revolutions, rapine, and bloodshed. As most of the Mameluke sultans who resided in the citadel died a violent death, so the reign of almost every new potentate began with bitter and sanguinary contests among the emîrs for the office of vizier, while but few reigns were undisturbed by insurrections in the capital. During the third régime of Mohammed en-Naṣîr, who had been twice deposed, and as often recovered his throne, a persecution of the Christians took place at Cairo. The Christians, of whom great numbers resided in Cairo and throughout the whole of Egypt, were accused by the people of incendiarism. Their churches were accordingly closed or demolished, while they themselves were so ill-treated and oppressed, especially in the reign of Sultân Ṣâleh (1351-54), that many of them are said to have embraced Islamism. In 1366 and 1367, in the reign of Sult ân Shábân, sanguinary conflicts took place in the streets of Cairo between hostile parties of Mamelukes, and in 1377 Sha'bân himself was tortured and strangled in the citadel. Even greater disorders attended the dethronement of Sultân Barkûk (1389), when the wildest anarchy prevailed at Cairo, the convicts escaped from their prisons, and in concert with the populace plundered the houses of the emîrs and the public magazines. The following year a rebellion again broke out among the Mamelukes, who stormed the citadel, in consequence of which Barkûk regained possession of the throne, and celebrated his triumphal entry into Cairo. Scarcely, however, had he closed his eyes and been succeeded by Farag, when the Mamelukes again revolted, and renewed conflicts took place for possession of the citadel, during which the city was partly plundered. Similar scenes were repeated on almost every change of government. The turbulence of the Mamelukes, who were always treated with too much consideration by the sultans, now became more and more unbearable; they robbed the people in the markets, assaulted citizens in the public streets, and grossly insulted respectable women. Hitherto the outrages committed by these troops had been chiefly connected with some political object, but from the middle of the

15th century downwards they were generally perpetrated with a view to plunder. Thus in 1458 , when fires repeatedly broke out at Cairo and Bûlâk, it was generally believed that the Mamelnkes had caused them in order to obtain opportunities for robbery. In the course of the following year they forcibly entered and robbed the mosque of 'Amr at Old Cairo. In the sultanate of Khoshkâdem (1461-67) the Mamelukes plundered the bazaars of Old Cairo, and in the reign of Mohammed (1496-98), son of Kâit-Bey, they roved through the streets at night, maltreated the police, and plundered various quarters of the city. In 1496, when rival emîrs were almost daily fighting in the streets of Cairo, the Mamelukes of course utilised the opportunity for plunder.

On 26th Jan., 1517, the Osman Sultân Selîm I., after having gained a victory in the neighbourhood of Heliopolis (p. 128), entered the city. Ṭûmân Bey, the last Mameluke sultan, again gained possession of the ill-guarded town on 28th Jan., but was obliged to evacuate it on the following day, and was taken prisoner and executed (p. 62). Before Selîm returned to Constantinople, he caused the finest marble columns which adorned the palace in the citadel to be removed to his own capital. Thenceforward Cairo became a mere provincial capital, and its history is almost an entire blank down to the period of the French expedition. On 22nd July, 1798, after the Battle of the Pyramids, Cairo was occupied by Bonaparte, who established his headquarters here for several months, and who quelled with sanguinary severity an insurrection which broke out among the populace on 23rd-25th September. At the beginning of the year 1799 Bonaparte started from Cairo on his Syrian expedition, and on his return to France, Kléber was left as commander-in-chief of the French troops at Cairo, where he was assassinated on 14th June, 1800. In 1801 the French garrison under Belliard, being hard pressed by the grand-vizier, was compelled to capitulate. On 3rd August, 1805, Mohammed ${ }^{〔} A l$, as the recognised pasha of Egypt, took possession of the citadel, which for the last time witnessed a bloody scene on 1st March, 1811, when the Mameluke Beys were massacred by Mohammed's order. Since then nothing has interrupted the peaceful development of the city.

The ${ }^{* *}$ Street Scenes presented by the city of the Khalîfs afford an inexhaustible fund of amusement and delight, admirably illustrating the whole world of Oriental fiction, and producing an indelible impression on the uninitiated denizen of the West. 'What makes Cairo so romantic and novel is the contrasts of barbarous and civilised scenes and incidents it presents, which forcibly strike and interest even the most utterly blasé European, and which recur in every department and phase of life in this Arabian capital of the desert, and indeed throughout all Egypt. Cairo may be compared to a mosaic of the most fantastic and bizarre descrip-
tion, in which all nations, customs, and epochs are represented, - a living museum of all imaginable and unimaginable phases of existence, of refinement and degeneracy, of civilisation and barbarism, of knowledge and ignorance, of paganism, Christianity, and Mohammedanism. In the Boulevards of Paris and on London Bridge I saw but the shadow, and at Alexandria the prelude only, of the Babel of Cairo, to which the Roman or the Venetian carnival is tame and commonplace. These marvellous scenes cannot fail to strike every one, and particularly the uninitiated new-comer, most forcibly' (B. Goltz).

This Oriental life seems to feel the atmosphere of the newer quarters uncongenial, and it must therefore be sought for in the old Arabian quarters, which are still mostly inaccessible for carriages, in spite of the many new streets that have been constructed in Cairo of late years. Most of the streets in the old part of the town are still unpaved, and they are too often excessively dirty. The lanes separating the rows of houses in the Arabian quarter are so narrow that there is hardly room for two riders to pass, and the projecting balconies of the harems with their gratings often nearly meet. The busy traffic in these streets presents an 'interminable, ravelled, and twisted string of men, women, and animals, of walkers, riders, and carriages of every description. Add to this the cracking of the drivers' whips, the jingling of money at the table of the changers established at every corner of the street, the rattling of the brazen vessels of the water-carriers, the moaning of the camels, braying of donkeys, and barking of dogs, and you have a perfect pandemonium'. Europeans, and even ladies, may ride with perfect safety through the midst of all this confusion, and they will often have opportunities of observing most picturesque and amusing scenes. The denseness of the crowd sometimes seems to preclude the possibility of farther progress, but the hammâr, or donkey-boy, is pretty sure to elbow a passage without much difficulty. Lovers of the picturesque will find such rides very enjoyable. It is not, however, until the traveller has learned to distinguish the various individuals who throng the streets, and knows their different pursuits, that he can thoroughly appreciate his walks or rides. We may therefore give a brief description of some of the leading characteristics of the different members of the community.

From a very early period it has been customary for the Arabs to distinguish their different sects, families, and dynasties by the colour of their Turbans. Green is the prophet's colour. Green turbans, therefore, are the badge of the 'Sherîfs', or descendants of the prophet, and they are also frequently worn by the Mecca pilgrims. But the green turban is not much respected in Cairo, where it too often serves as an excuse for laziness; many of the prophet's descendants now wear white instead. The 'Ulama, or clergy and scholars, usually wear a very wide and broad, evenly folded tur-
ban of light colour. The orthodox length of a believer's turban is seven times that of his head, being equivalent to the whole length of his body, in order that the turban may afterwards be used as the wearer's winding sheet, and that this circumstance may familiarise him with the thought of death. The dress and turbans of the Copts, Jews, and other non-Muslim citizens, are generally of a dark colour, those of the Copts being blue, and those of the Jews yellow, in accordance with a decree issued in the 14th century (p. oxxv). Blue is also the colour indicative of mourning.

The Women of the poorer and rustic classes wear nothing but a blue gown and a veil. Their ornaments consist of silver or copper bracelets, earrings, and ankle-rings, while their chins, arms, and chests are often tatooed with blue marks. In Upper Egypt noserings are also frequently seen. The women of the upper classes are never so handsomely dressed in the streets as at home. When equipped for riding or walking, they wear a light-coloured silk cloak, with very wide sleeves (tof or sableh), over their home attire. They also don the burleor, or veil, which consists of a long strip of muslin, covering the whole of the face except the eyes, and reaching nearly to the feet. Lastly they put on the habara, a kind of mantle, which in the case of married women consists of two breadths of glossy black silk. Thus disguised, they look unnaturally broad and unwieldy, and not unlike bats. Young girls usually wear a white mantle. The wealthier ladies, who drive in their carriages attended by eunuchs, usually veil their faces up to their eyes with thin gauze in accordance with the fashion of Constantinople. The figures of Egyptian womeu, in early life, are generally upright and graceful. They colour their eyelashes and eyelids dark, and their finger and toe-nails with henna, which gives them a brownish-yellow tint. Among other customs we may also mention the peculiar mode in which a woman carries her child, either astride her shoulder, or resting on her hip. With regard to circumcision, wed-
 dings, and funerals, the ceremonies attending which are similar in all the Egyptian towns, see p. xcvii.

Amid this busy throng of men and animals resound the various cries of street-vendors and other persons who transact their business in the open air, and the warning shouts of outrunners (sâis), coachmen, donkey-attendants, and camel-drivers. The words most commonly heard are - 'riglak', 'shemâlak', 'yeminak', 'guarda', ' ${ }^{\prime}$ ' $\hat{a}$, u'â'. As a rule, however, the Cairenes pay no atteution to these warn-
ings unless addressed to them individually. Thus, 'riglák yâ khawâyeh' ('your foot, sir', i.e. 'take care of your foot'; lehawageh is the usual title given to Europeans by the Arabs, and is said to have originally meant 'merchant' only) ;
 'shemâlak y â shêkh' ('your left side, 0 chief'); 'yemînak yâ bint' ('your right side, girl'); 'dahrik y $\hat{a}$ sitt' ('your back, lady'); ' $y \hat{d}$ 'arûseh' (bride); 'yâ sherif' (descendant of the prophet); 'yâ efendi' (Turkish official). Beggars are very numerous at Cairo, most of them being blind. They endeavour to excite compassion by invoking the aid of Allah: 'yâ Mohannin, yâ Rabb' ('O awakener of pity, $\dot{O}$ Master'); 'tâlib min allâh hallk lukmet 'êsh' ('I seek from my Lord the price of a morsel of bread'); 'âna dêf Allâh $w a$ 'n-nebi' ('I am the guest of God and of the Prophet'). The usual answer of the passerby is, 'Allâh yihannin ‘alêk' ('God will have mercy on you'), or 'Allâh ya'tîk' ('God give thee'; comp. p. xxii).
One of the most popular characters to be met with in the streets of Cairo is the Sakga, or Water-Carribr, with his goatskin of water, carried either by himself or by a donkey, who still plies his trade, although the water-works (p. 72) supply every house in the city, as well as the public sebils (p. oxci), with water, and though on many of the houses there are brass tubes through which passers-by may take a draught from the main pipes. His usual cry is - 'yâ auwad Allâh' ('may God recompense me'). Many of the sakkas sell water to
 the people in the streets. These are known as 'sallica sharbeh', and they carry their supply of water either in a skin or in a large earthenware vessel on their backs. They offer a draught to passers-by in a brazen saucer or in a kulleh (porous bottle), for which they receive a small copper coin, and sometimes no payment at all. On the occasion of festivals, and particularly on the môlids (birthdays) of saints, persons who desire to do a pious work frequently hire one of the sakkas to dispense water gratuitously. The sakka then
shouts in a singing tone, 'seb̂̂l Allâh yấatshân yâ môyeh', thus inviting all thirsty persons to drink gratuitously; while he occasionally turns to his employer, who generally stands near him, with the words, 'God forgive thy sins, 0 dispenser of the drink-offering', or 'God have mercy on thy parents', to which the persons who have partaken of the water reply, 'amin' (amen), or 'God have mercy on them and on us'. After numerous blessings of a similar kind have been interchanged, the sakka hands the last cup of water to his employer, with the words, 'The remainder for the liberal man, and Paradise for the confessor of the Unity 1 God bless thee, thou dispenser of the drink-offering!'

The Hemali, who belong to one of the orders of dervishes (p. xcy), are also engaged in selling water, which they flavour with orange-blossom (zahr), while others add a little brandy ('erk-sûs) or grape-juice (zebîb). There are also numerous itinerant vendors of different kinds of sweetmeats, which to Europeans look very uninviting. Thus, sahlab is a thin jelly made of wheatstarch and sugar, the sellers of which shout, 'halâweh, yâ sukkar bimismâr yâ halâweh?' (confection, 0 sugar, for a nail, 0 confection!). These vendors, who resemble the rag and bone collectors of European towns, often barter their wares for nails or pieces of old iron, as their call indicates. Lastly, there are itinerant cooks, with portable kitchens, who sell small meat puddings, fish, and other comestibles, and whose customers eat their dinners sitting cross-legged by the side of the street. This custom is noticed by the old German geographer Sebastian Münster (d. 1552), who says that 'the city of Cairo is said to be five times as large as Paris. There are few people, who, as with us, buy food to prepare at home; but when they are hungry they buy from the
 cooks, of whom the city contains nearly thirty thousand'.

The way in which fruit and vegetables are cried is particularly curious. The commonest expressions are perhaps the following : 'Allâh yehawwinheh yâ lêmûn' ('God will make them light, 0 lemons'; i.e., he will make light, or empty the baskets containing the lemons) ; "asal yâ burlukân, 'asal' ('honey, O oranges, honey'; i.e., sweet as honey); 'meded yâ Embâbeh meded! tirmis Embâbeh yaghlib el-lôz !' 'yâ mahlâ bunei el-bahrr' ('help! O Embâbeh, help! the lupins of Embâbeh are better than almonds; Oh, how sweet is the little son of the river l'). The best lupins are grown at Embâbeh, and they are called 'children of the river' from the fact that
they require to be soaked in Nile water for a considerable time before they are boiled. Other cries are 'ya muselli'l-ghalbân yâ libb' ('O comforter of those in distress, kernels', i.e., of the melon) ; or, more commonly, 'el-mohammas.' ('roasted kernels'); 'yâ fustule gedîd' (new pistachios); 'elward kê̂n shôk min‘arak ennebi fettah' ('the rose was a thorn; it blossomed from the sweat of the prophet'). This legend resembles that of the thorns at Subiaco among the Sabine Hills, which were converted into rose bushes by the blood of St. Francis. 'Rawâyeh elgenneh yâ temer henna' ('odours of Paradise, 0 flowers of henna'). With regard to the henna plant, see p. Ixxiv. Most of the Arabian barbers have their shops open to the street. Their principal occupation consists in shaving the heads of their customers in Oriental fash-
 ion, an art in which they are very expert. When the operation is over, they hold a look-ing-glass before the customer, saying - 'naîman' (may it be pleasant to you), to which the usual reply is - 'Allâh yin'im 'alêk' (God make it pleasant to thee).

Towards evening the solemn and sonorous cry of the mueddin, summoning the faithful to prayer(see p.xci), reverberates from the tops of the minarets. When the shops are shut the porters and watchmen place their beds (serir) of palm-twigs in the streets outside the entrances, and prepare to spend the night there; sometimes they have only mats
or rugs to sleep on. But much of the busy street-traffic goes on till nearly midnight, and during the month of Ramadàn it even continues throughout the whole night, while the barking of hungry dogs and the braying of donkeys frequently form an additional interruption to repose.

The traveller will frequently have occasion to observe the Schools (luttâb), of which there are about 300 in Cairo, with $8-9000$ scholars, and one of which is attached to almost every public fountain. He will find it very amusing to watch the efforts of the fikih, or schoolmaster, in teaching his pupils with the aid of admonitions and blows, while the boys themselves recite verses of the Korân with a swaying motion of their bodies, bending over their metal writingtablets, and yet finding time for the same tricks as European schoolboys. It is not advisable to watch the fikîh too closely, as he is easily disconcerted and is then apt to be uncivil.

These schools are maintained by the private enterprise of the schoolmasters themselves, who exact 1-2 piastres per week from each pupil. The schools all have a purely religious character, and are exclusively creations of El-Islâm. The mere reading and recitation of verses from the Korân being in itself considered a meritorious act, the great object of these schools is to teach the pupils to recite the Korân by heart. Each boy is provided with a copy of the sacred book, if he can afford to buy one, an ink and pen case (dawdyeh), and a tablet of metal or of wood painted white. After learning the alphabet, the pronunciation and the values of numbers, he is then taught the ninety-nine 'beautiful names of Allah' contained in the Korân, a knowledge of which is necessary to enable him to repeat the ninety-nine prayers of the Mohammedan rosary (sebha). The boy is then made to write out the Fatha, or first chapter (sûreh) of the Korân, which he reads often enough to impress it perfectly on his memory, swaying his body to and fro the while, whereby, as he imagines, his memory is rendered more pliant. After learning the first chapter, he next proceeds to learn the last, the last bat one, and the others in the same inverted order, until he reaches the second, the reason being that the chapters gradually diminish in length from the second to the last. Although the language is often difficult and obscure, no explanations are given, so that the boy who knows the whole book by heart usually understands but little of it. As soon as the boy has learned the whole of the Korân in this way, the completion of his studies is commemorated by the celebration of the Khatmeh, a family festival, to which the schoolmaster is invited.

The Bazaarst of Cairo, though inferior to those of Damascus and Constantinople, present to the European traveller many novel features and many interesting traits of Oriental character. As is the universal custom in the East, shops of the same kind, with their workshops, are congregated together in the same quarter, named sometimes after a mosque, but more usually after the wares there sold, e.g. Sûk en-Nahhâsin, bazaar of the coppersmiths, Sûk el-Kurdagîyeh, bazaar of the ironmongers.

Most of the bazaars consist of narrow, and often dirty, lanes,

[^23]generally covered over with an awning to shade them from the sun, and flanked with shops about 6 ft . wide. These shops (dûlkan) are open towards the street, and in front of each is a Mastaba or seat on which the customer takes his place and on which the shopkeeper offers his prayers at the appointed hours. The inscriptions above and in the shop do not consist of the dealer's name, but of various pious ejaculations, such as 'Oh Allah, locker of the gate of gain, oh, all-nourisher', 'the help of Allah and a speedy victory', etc. These lanes usually enclose a massive storehouse of considerable size (khân), consisting of two stories. Some of the older of these buildings, particularly those in the Gamâlîyeh (pp.51,71) and the Khân el-Khalîl (p. 49), are architecturally interesting, and possess handsome mushrebîyehs. Several of these khâns form a quarter of the city (hâra). These were formerly closed by massive, ironmounted gates, still in some cases preserved; and they were carefully guarded at night by watchmen appointed for the purpose. No one was permitted to pass through the gates without undergoing an examination by the custodian, but this custom has been given up at Cairo. In former times, during the prevalence of the Mameluke conflicts, which were always attended with the pillaging and assassination of many peaceful citizens, the gates of the khàns frequently remained closed for several days together, for the purpose of affording protection against the outrages of these lawless mercenaries.

The principal market-days are Monday and Thursday, when the traffic in the narrow streets is so great that it becomes difficult or impossible to traverse them. Pedlers are seen forcing their way through the crowd, shouting at the top of their voices, sometimes carrying a small table with them, and frequently selling their wares by auction. So, too, we observe coffee-sellers, water-bearers, nar-gileh-hawkers, and others, elbowing their way, lauding their commodities, and escaping accidents almost by a miracle. One of the noisiest frequenters of the bazaars is the dallâl, or auctioneer, who carries on his head or shoulders the goods he is instructed to sell, and runs up and down the lanes shouting 'harâg, harâg', and adding the amount of the last bid he has received. However great the confusion may be, his practised ear instantly detects each new bid issuing from one of the dukkâns, and he immediately announces the new offer - 'bi'ishrin kirsh', 'bïishrin u nus', and so on. The seller of the goods always accompanies the dallâl to give his consent to the conclusion of the transaction.

It is hardly possible to give the traveller any idea of the prices of the various commodities, as they depend on the demand, which is greater in winter than in summer, and also on the character of the seller and the demeanour of the purchaser. Caution in making a purchase is far more requisite in the East than in Europe, as Orientals regard skill in cheating simply as a desirable accomplishment.

In walking through bazaars and other streets the traveller will be interested in observing how industriously and skillfully the Artizans work, with tools of the most primitive description. The turners (Kharrât), for example, are equally adroit with hand and foot. The following are the Arabic names for some of the commoner handicraftsmen: Khaiydt, tailor; Sabbagh, dyer; Reffa, stockingmaker;'Alkkâd, silk-ribbon maker; Gizzâr, butcher; Farrân, baker; Samkari, plumber; Haddâd, smith; Sâcâti, watch-maker. The following are trades not mentioned in our description of the bazaars (pp. 47-50): Tâgir, draper; Dakhâkhni, tobacconist; Fâkihâni, fruiterer; Zeiyât, oil and butter dealer; Khudari, green-grocer; Shammâ, tallow-chandler.

European travellers who purpose making large purchases in the bazaars, must arm themselves beforehand with the most inexhaustible patience. Time has no value for an Oriental, and that fact must be taken into the calculation. Everything must be haggled for, sometimes in the most obstinate fashion. When the customer knows the proper price and offers it, the dealer will remark 'Kalí' (it is little), but will close the bargain. Sometimes the shopkeeper sends for coffee from a neighbouring coffeehouse in the course of the bargaining. If no satisfactory agreement can be reached, the customer should calmly proceed on his way. Every step he takes will lower the demands of the obdurate dealer. It is advisable to offer at first rather a lower sum than the purchaser is willing to pay, in order that the offer may be raised ' $\min$ shanak' (for your sake). A common phrase in the ceremonious East is ' $k u d u$ balds $h$ ' (take it for nothing), which, however, is as little seriously meant as the well-known 'bêtí bêtak' (my house is thine). The opiuion of the shopkeepers seems rather to be ' $k i s a k$ kîsi' (thy purse is mine). Foreigners, however, must be prepared to pay more than natives. Dragomans and commissionnaires always have a private understanding with the dealer, so that to make purchases in their company is to add 10-20 per cent to the price.

## 1. The Ezbekiyeh and the New Isma'lliya Quarter.

The central point of the foreign quarter, between the old Arabian Cairo and the new town, built in the French style within the last 25 years, is the -
*Ezbekiyeh Garden (Pl. C, 3), or simply the Ezbekîyeh, which is named after the heroic Emîr Ezbek, the general of Sulṭ̂n Kâït Bey (1468-96; p. 58), who brought the general and son-inlaw of Bajesid I. as a captive to Cairo. A mosque was erected here in honour of his victory; and, though the building no longer exists, its name still attaches to the site. The fine gardens were laid out in 1870 by M. Barillet (p.lxxv), formerly chief gardener to the city of Paris. They are octagonal in shape, and cover an area of $201 / 2$ acres; the walks are altogether $1 \frac{1}{2} \mathrm{M}$. in length. The gardens contain a variety of rare and beautiful trees and shrubs, and the open spaces are planted with the Lippia nodiflora, to supply the place of grass, which does not thrive in this dry climate. The greatest show of blossoms is in May and June. An artificial hill with a belvedere commands the best view, and below it is a pretty grotto. Among the other attractions of the place are several cafés,
a summer-theatre (p. 32), a restaurant, in the E. part of the garden, switch-back railways, small boats for hire on the ponds, etc. An Egyptian band, which generally performs European music, plays here daily from 5 to about $8 \mathrm{p} . \mathrm{m}$., when a charge of $1 / 2$ pias. (no change given) is made for admission. The European residents in Cairo of the better class are seldom seen in the garden, but it is the fashion for Arabs to send their veiled wives and their children to promenade here. The gardens afford a delightful promenade at all periods of the day, and they present a very attractive appearance by gaslight; but invalids who spend the winter in Cairo for the sake of their health should be careful to leave them before sundown, after which the air here is very damp.

The Ezbekîyeh is surrounded by the principal Hotels (p. 27), numerous Cafés, attractive shops, aud handsome dwelling-houses, which are continued iuto the New Quarter of Ismailiya. The quarter was begun by the Khedive Isma'îl Pasha (p. cxxix), who desired to rival the modern quarters of Paris, and presented sites here gratuitously to any one who would undertake to erect on each a house worth at least $30,000 \mathrm{fr}$. within eighteen months. Most of the houses are architecturally uninteresting, but there is a fair sprinkling of handsome buildings.

Adjoining the Ezbekîyeh on the N.W. is the small square of Meidân el-Khaznedâr (Pl. C, 3; Boulevard Clot-Bey, see p. 75). To the S.E. is the International Tribunal (Pl. C, 3; Tribunaux Mixtes), beyond which is the small 'place' named 'Atabet el-Hadra, whence the Muski (p. 47) leads to the E. To the W. of the International Tribunal is the General Post Office (Pl. C, 3; p. 29), from which the cab-tariff is calculated (p. 30) and which thus forms the centre of the town for visitors. - On the S. side of the Ezbekîyeh is the Opera House, nearly opposite which, to the E., rises the hearylooking New Hotel. In the Place de l'Opéra (Pl.B, C, 3), between these, is an Equestrian Statue of Ibrâhîm Pasha, which was removed from the 'Atabet el-Haḍa during Arabi Pasha's revolution in 1882 and preserved for some years in a magazine. - To the S.W. of the NewHotel are the German Protestant Church (Pl. B, 3; p. 32) and the English Church (Pl. B, 3; p. 32). Still farther to the W. is the residence of M. Delort, the banker, in the early Arabian style, the interior of which, partly fitted up with relics from old Arabian houses, is worthy of a visit.

The new Isma'ililiya quarter, with its wide tree-shaded streets, extends between the old parts of the town and the Nile. Here are situated the extensive Khedivial' Abdîn Palace (Pl. C, 4), the ministerial offices, most of the consulates, and many palaces of Egyptian grandees, with gardens enclosed by high walls, so that only the roofs are visible to passers-by. - On the way to the Great Nile Bridge (p. 91) we pass the Square of Bâb el-Lak (Pl. B, 4). - Beside the bridge is the huge barrack of Kasr en-Nil (Pl. A, 4). - In the long street
named Shâría Masr el-'Atîka (PI. A, 4) lie the Palace of Husên Pasha, brother of the Khedive, and, on the opposite side, the viceregal Palace Isma'iliyeh, built in 1876, and a new quarter in course of erection on the site of the Palace Kassr ed-Dubara, including the British Consulate-General (PI. A, 5). On the E. side of the street is the Ministry of Public Works and of War. In the N.W. angle of the grounds is the Institut Egyptien; in the S.W. angle, the Société Géographique; and on the E. side, the Viceregal Laboratory, with the Office of Hygiene. The medicines required for all the hospitals in the country are prepared at the laboratory, and the yield of the 12 saltpetre manufactories of Egypt is tested here. - Farther on, to the right, on the Nile, is the Palace Ibrâhîm Pasha (PI. A, 6), with a large garden. Then the straggling Palace Kasr 'Ali (Pl. A, 6), at present occupied by Prince Husên Pasba, and the large Hospital of Kasr cl-'Ain (Pl. A, 7), with the Mosque of Kasr el-fian, in which the howling dervishes hold their Zikr ( $\mathrm{p} . \mathrm{xc} \mathbf{\mathrm { v }}$ ).

It need hardly be added that the traveller in search of Oriental scenes will not care to devote much time to this modern and almost entirely European quarter, but will hasten to make acquaintance with the Arabian parts of the city.

## 2. The Muski and the Bazaars.


#### Abstract

A visit to the chief Bazaars (comp. p. 43), to which this section is devoted, is so full of novelty and interest, that the traveller will scarcely have time to combine with it the inspection of the Mosques passed on the way. The description of these is therefore reserved for the following sections (Nos. 3 and 4). - Mounted on donkeys (p. 30), both ladies and gentlemen may plunge fearlessly into the thickest of the crowd; while gentlemen, even on foot and alone, aided by the following description and the plan of the town (p. 27), will have little difficulty in finding their way without any other assistance.

The chief thoroughfare of Cairo is the *Muski (Pl. C, D, 3), which begins at the small square of 'Atabet el-Hadra (p. 46), and, with its E. continuation the Rue Neuve, traverses the entire breadth of the old town (nearly 1 M .). This street has now to a great extent lost its external Oriental characteristics. The numerous tobacco and cigar stores and emporiums of clothing present quite a European exterior; but the stalls of the fez-makers, with the peculiarly shaped iron they use in their trade, still remind us that we are in the $\mathbf{E}$. (The price of a fez or tarbûsh varies from 2 fr . to 5 fr . according to the material with which it is lined.) But the Oriental features of the traffic (p.37), that surges up and down the street from morning till night, are still unchanged. We ascend the Muski to a small place called the Rond-Point (Pl. D, 3), beyond which the street is named the Rue Neuve (pp. 49, 67).

Immediately before this place is reached, we diverge by the Shâri'a Hammâm et-Talât to the right, and follow the first lane to the left, the Shâría es-Sultân ez-Zâhîr (Pl, D, 3; running parallel with the Rue Neuve), passing a red and yellow mosque on the right,


and disregarding the attraction of the European glass wares sold here. Pursuing a straight direction (i.e., as straight as the crooked lanes admit of), we pass an Arabian gateway on the left, and, on the right, the end of a narrow lane, through which we perceive the entrance to an uninteresting Greek church.

Farther on, beyond the covered entrance of a bazaar in ruins, we turn once more to the right by the Shâria el-Hamzâwi eṣ-Seghîr (Pl. E, 3), in which is the bazaar of the same name. The Suk elHamzâwi is the bazaar of the Christian merchants (Syrians and $\dot{\text { Copts }}$ ), who vie with their Mohammedan fellow-tradesmen in the exorbitance of their demands, and whose chief wares are European calico, porcelain, and drugs (which last are sold at all the bazaars). Near the end of this winding street, a little before its junction with the broader street El-‘Alkikadin (see below), we observe on the right the covered Shârǐa et-Tarbiya (Pl. E, 3), with the Sulk el-'Atṭárin, or spice-market, which is easily distinguished by its aromatic odours. The perfumes of Arabia, genuine and adulterated, waxcandles, and drugs are the chief commodities here. Attar of roses is sold by weight at high prices. The small bottles into which it is usually put contain only one drop. Then follow the weavers and tailors.

The Shâría et-Tarbiya is continued to the S. by the Shâría elFahhâmin, in which is the Sak el-Faḥấmin (Pl. E, 3, 4), the bazaar for wares from Tunis and Algiers. We first observe drug-stalls, and then magazines of light-coloured woollen and other stuffs, Arabian rugs, etc. Silk for caftans also is manufactured here.

We now turn sharp to the right, then sharp to the left, and pursuing the same direction, parallel with the El-'Akkâdîn street, and passing a number of shoemakers' stalls (bawâbîshi), we come to a broader covered passage, which we follow to the right for a few paces, and then take the first lane to the left. This lane, with its dilapidated roof, is continued under the name of Shârïa el-Menachidin, and is inhabited chiefly by tailors, cloth-merchants, and dealers in undressed wool. A short abrupt curve of this lane, to the left, then brings us to a thoroughfare, which runs to the left under the name of Shâri'a el-'Akkâdinn (p. 49), and to the right under the successive names of el-Manâkhilîyeh and Sukkarîyeh (Pl. E, 4). This is the bazaar for sugar, dried fruits (nukl), fish, candles, and similar wares. On the left is an Arabian gateway, on the right, the mosque of El-Muaiyad (p.62), while facing us, at the end of the street, rises the handsome $B \hat{a} b$ ez-Zuwêleh (see p. 61). To the left again is the sebîl, with a mad beggar. Opposite the outside of the gate is a house with a large grated window, and in the corner is a column built into the wall, at which executions by strangulation formerly took place. - In a straight direction we next enter the covered Shoemakers' Bazaar, formerly a school-house, the first story of which overhangs the lower and is borne by large
brackets. This bazaar, and the neighbouring Sûle es-Surûzîyeh, or saddlers' bazaar, are of little interest.

We now retrace our steps to the N., by the street, the first part of which is called the Sukkarîyeh (see p. 48). Beyond the Sebîl
 (Pl. E, 3), farther on Shawayîn, and finally El-Ghûrîyeh from the mosque of $E l-G h u \hat{r} i($ p. 63), the small minaret of which, with its domes, rises nearly in the middle of the street. Opposite the mosque is a sebîl, with a large dome.

We follow this street in a straight direction nearly as far as the post of the lower sentry on the left, a little before reaching whom we turn to the right into the Shâría es-Sanâdikîyeh, also called Suk es-Sudán, or bazaar for wares from the Sûdần, consisting of chests, gum, dûm-palm nuts, ill-tanned tiger-skins, etc. Farther on, in a straight direction, at the point where the street expands a little, before reaching the handsome W. entrance of the El-Azhar mosque ( $p$. 63), we observe several houses with picturesque mushrebî̀yehs (p. cxcv).

The Shâría el-Halwaĝ̂ (Pl. E, 3), the next lane on the left, immediately before the $W$. entrance of the mosque, is mainly occupied by the score or more stalls of the Booksellers.

Most of the booksellers are also scholars, but they are not so fanatical as their brethren of Damascus, who sometimes decline to sell their books to Christians. Seated on their mastabas are frequently to be found various other members of the learned, or would-be learned, world, who spend whole days here in interminable colloquies. As the prices of books vary greatly in accordance with the demand and other circumstances, and there is no such thing as a fixed publishing price, purchasers should always endeavour to ascertain beforehand the true value of any work they wish to buy. As in the case of many other wares, the line between new and second-hand books is not so strictly drawn in the East as in Europe. The booksellers generally keep catalogues, several feet in length, to refresh their memories regarding the state of their stock. The Koran, which is shown very reluctantly to non-Muslims, is kept separate from the other books. The books are not arranged side by side as in European shops, but piled up in a very inconvenient fashion. Many of them are sold in loose sheets, in which case the purchaser should see that the work is complete, as gaps are of frequent occurrence. The bindings usually consist of leather or pasteboard. Valuable books are often kept in cases of red sheepskin, out of which they are drawn by means of a loop. - The workmanship of the bookbinders, who like other Oriental artizans work in the open street, is far inferior to European productions. Red is their favourite colour.

The lane next leads us across the Rue Neuve (p. 67), the prolongation of the Muski (passing a large school at the corner to the right) to the street Mashhad el-Heseinî (Pl. E, 3) towards the large minaret of the Hasanein Mosque (p. 67). Opposite to it, on the left, is a gateway through which we enter a covered bazaar now bearing the name of Sikket el-Badistân (Pl. E, 3), but better known as the Khân el-Khalîl, which once formed the centre of the commercial traffic of Cairo. This building, which is said to have been founded as early as the end of the 13 th cent. on the site of ruined tombs of the Khalîfs by El-Ashraf Ṣalàheddin Khalîl (1290-93),
one of the Bahrite Mameluke sultans, forms a distinct quarter of the city, and is intersected by a main street and numerous crosslanes, formed by long rows of stalls of tradesmen and artizans, all covered over. This is the headquarters of the silk and carpet merchants and the vendors of trinkets. We follow the Sikket elBâdistân, passing on the right a large carpet bazaar. Taking the third lane on the left, we pass through an interesting Arabian Gateway, opening to the S., with stalactite-vaulting, and embellished with inscriptions, serpentine-ornaments, and a few mosaics, and then descend five steps to the Brass Bazaar, in which many travellers are tempted to purchase. The gateway may be inspected in an interval of the bargaining. We then return to the Sikket elBâdistân, in the W. part of which are two other pretty gateways. Near the second of these is the entrance to the large Carpet Bazaar of Asadolla Irani, the successor to the once well-known Abdallah. The early Arabian court in which the bazaar lies is itself an object of interest.

The prices of Carpets, like those of other Oriental goods, are liable to great fluctuation. Those of Baghdâd and Brussa (in Asia Minor) are the most sought after, but imitations, manufactured at Brussels, are said to be not uncommon. They are chiefly remarkable for the harmonious arrangement of their colours. As soon as a purchaser appears, the dealers spread their wares over the whole court for his inspection. If the traveller is pressed for time he had better not attempt to make a purchase, as several hours must not unfrequently be spent in negotiation before a satisfactory bargain is concluded. The usual price of a light keffiyeh (shawl for the head) is about 50 pias., and of one of heavier quality, with red and yellow stripes and interwoven with gold thread, $80-100$ pias. The fringes are generally loosened and adjusted after the completion of the purchase. Many of the so-called Damascene silks, and particularly the lighter keffiyehs in pleasing colours, are manufactured at Lyons and Crefeld. The table-covers of red, blue, or black cloth, embroidered with coloured silk ( $\mathcal{E} E .1 / 2-4$ ), are well worthy of notice. The letters with which they are adorned rarely have any meaning.

Leaving Irani's bazaar, we proceed towards the W., and beyond an abrupt turning of the street, reach the better-lighted Shâri'a elKhordagîyeh (see below). This we cross in a somewhat oblique direction, and pass through a very insignificant gate into the Stak esṢáigh (pl. Siyâgh), or bazaar of the gold and silver smiths, which consists of several crooked lanes, barely a yard in width, through which the traveller will sometimes find it difficult to thread his way. The occupants of these crowded alleys keep their wares in glass cases or under glass shades. Their stalls present a very poor appearance, but their filagree-work is sometimes very good. Spurious gold and silver wares are not unfrequently sold as genuine. The silver manufactured at the shops ought to bear a government stamp, indicating the number of carats it contains. - In the Jewish quarter, to the W. of the Sûk es-Sâigh, are the booths of the Jewellers (Gôhargiveh), where, however, there is nothing to see, as they show their wares to intending purchasers only.

From this labyrinth of lanes we return to the Shâría el-Khor-
dagîyeh ( $\mathrm{Pl} . \mathbf{E}, 3$ ), which contains the uninteresting Stak en-Nahhasin, or market of the copper-smiths. Several pipe-makers (shi$\dot{b} u l s s h i$ ) are also established here. On the left side of this street are the imposing red and white façades of the mosques of Mûristân Kalâûn, Mohammed en-Nâşir, and Barlêukîyeh (see pp. 69, 70).

The route just described has included all the more interesting bazaars, and we may conclude our excursion by following the broad Shâri"a Beit to the Bêt el-Kảdi (Pl. E, 3), or 'House of the Judge'. Part of the building still dates from the time of Saladin (1193). In the large court on the right is an open verandah, resting on columns with early Arabian capitals (takhta bôsh; p. cc). This is the entrance to the building in which the kâdi holds his court on Sat. (at 4 p.m. Arab time). This court was formerly the supreme tribunal of the country, and the appointment of Kâdic was made by the government at Constantinople, and was frequently bestowed upon favourites, as it was said to be a very lucrative post. Now, however, the keâdi is always an Egyptian, and his jurisdiction is limited to cases in which the law laid down by the Korân is to be administered, and particularly to actions between married persons.

Crossing the court, and passing through the gate in the other wing of the building, opposite the Shâri'a Beit, we next follow the windings of the narrow lane to the left as far as a sentry posted between the insignificant mosque of Yûsuf Gamâli (Pl. E, 3) and the Okella Zulflkâr Pasha (p. 71). The street called Gamâlâyeh leads hence to the Bâb en-Nasr, see p. 72.

## 3. The South-Eastern Quarters.

The route described in this section leads viâ the Boulevard MéhémetAli and the Place Sulttann Hasan to the Citadel, and thence by a wide curve to the $S$. back to the boulevard.

Starting from the Place 'Atabet el-Hadra, between the Muski and the Ezbekîyeh (see p. 45), the Bouievard Méhémet-Ali (Pl. C, D, 3-5), 1860 yds . in length, leads to the S.E. straight to the foot of the citadel. A little less than halfway down the boulevard we cross the El-Khalig canal ; to the left lies the Place Bàb el-Khalîg (p. 61), to the right the beginning of the Habbanîyeh (p. 61). About $1 / 4 \mathrm{M}$. farther on, a side-street leads to the $D a^{\circ} \hat{u} d i \hat{y} y$ eh quarter, with the Gamía el-Melekeh Sofiya (Pl. D, 5; entrance by the S. portal), a Turkish-Arabian mosque of 1611 (1019 of the Hegira), with a dome supported by antique columns, and ornamented in the Byzantine-Arabian style. The mimbar is of marble. A short visit may also be paid to the small mosque of $E l-$ Burdêni (PJ.D, 5), built in the year 1038 of the Hegira (A.D. 1630) and restored in 1885, lavishly adorned with mosaics, and adjoined by a large and elegant minaret. - Farther on, the boulevard passes the uninteresting mosque of $E l-K$ ês $\hat{u}$ ('Asûn'; Pl. D, 5), intersects the line of streets running N . and S. (mentioned at pp. 56, 61), and ends at the -

Plack Sulpâa Hasan (Pl. E, 6), in which there are two large mosques. That on the left is the Gami'a Rifáciyeh, named after an order of dervishes (p. xciv), and erected entirely at the expense of the mother of the ex-Khedive Ismaill (who, with several other princesses, is buried here), but still unfinished. Besides the family tomb of the Khedive, it contains also the Mausoleum of Shêkh Rifấi, which is adorned with rich and tasteful iron-work and wood-carving. On the right rises the -
**Gàmi'a Sulṭân Hasan (Pl. E, 6), the 'superb mosque', and the finest existing monument of Byzantine-Arabian architecture. It was begun in the year 757 of the Hegira (A.D. 1356), and completed in three years by Melik en-Nâṣir Abu'l-Ma'âli Hasan ibn Kalaûn (p.cxxiv). The exterior of this huge building recalls the broad surfaces of the early-Egyptian temples. The massive **Gateway (Pl. I), 60 ft . high, is of considerable importance in the history of art, for it has been more or less closely imitated in the entrances to many other Egyptian and even Persian-Arabian mosques, notably in that of Ispahan. The lofty façade with its shallow niches is pierced with six or seven windows placed unsymmetrically one above the other. The boldly projecting main cornice, with its 'stalactite' formation, is unique. - The S. Minaret is the highest minaret in Cairo, measuring 280 ft . (that of El-Ghûri 213 ft ., Kalaûn 193 ft ., Muaiyad $167 \mathrm{ft} .$, El-Azhar 167 ft , Kẫ̈t Bey and Barkûk 164 ft ., Tulûn 132 ft ., ' $A m r u 105 \mathrm{ft}$.). The corresponding minaret on the $\mathbf{N}$. façade was overthrown by an earthquake, but was afterwards rebuilt on a


1. Chief Entrance (from the Boul. Méhémet-「Ali). 2. Vestibule. 3. Corridor. 4. Mêda. 5. Hanefîyeh. 6. Dikkeh. 7. Kibla. 8. Mimbar. 9. Mausoleum of Sultân Hasan. 10. Sultan's Entrancé. 11. Minarets. 12. Receptionrooms and dwellings for the priests and attendants of the mosque and medreseh, and cells for pilgrims.
smaller scale. The dome was also destroyed, and dates in its present form from the Turkish period. The angles of the façade are embellished with quarter-columns built into the walls, with capitals formed of wreaths of pendentives or 'stalactites'.

The building is in the form of an irregular pentagon, in which the cruciform shape of the original Medreseh (p. clexxix) has been skilfully incorporated. The Lîwân are roofed with lofty pointed vaulting, which is found in scarcely any of the other devotional rooms. The visitor should notice the beautiful architecture of the Kibla (Pl. 7), the marble mosaics, the fine frieze, embellished with a Cuftc inscription, in the Sanctuary, and the huge dome ( 180 ft .) of the Mausoleum (in front of the medreseh), supported by drims resting, in the Byzantine style, upon girders which are concealed by Arabian stalactite pendentives. The stalactite-vaulting of the vestibule and the entrance deserves a glance as we quit the mosque. - The mosque stands in urgent need of restoration, which is, however, delayed on account of its cost ( $30-40,000 l$.). But in spite of all its dilapidation, the huge proportions of the building, combined with the masterly execution of the details, produce an impression of great majesty. Various Byzantine motives may be detected among the decorative details, and, indeed, according to the legend, the architect was a Greek, whose 'mason's mark' is pointed out in the representations of Byzantine façades on a miniature pillar on the right wall of the gateway.

On leaving this mosque, we proceed to the E. (right) to the circular Placb Rumb̂leh (Pl.E, 6), from which the Mecca pilgrimage starts ( p . cii), and to the Place Méhémet, Ali (Menshiyeh Gedîdeh, or New Place), formerly called the Karamêdan, on the S. side of the Rumêleh. The latter, about 650 yds. in lengtb, extends to the Bâb el-Karâfeh (p. 80), the S.E. gate of the city. From the middle of the 'Place', opposite the old Helwân station, we enjoy a splendid *View of the Mosque of Mohammed 'Ali (p. 54).

From the $\mathbf{E}$. side of the Rumêleh a broad carriage-road, passing two mosques (on the left: the Gâmi'a el-Mahmûdîyeh, and beyond it the Gâmi'a'Abderrahmân, with a decaying minaret), and affording a view of the Tombs of the Khalifs to the left, ascends in windings to the Citadel. A shorter and steeper route, which may be ascended on donkey-back, diverges to the right near the beginning of the carriage-road, passing through the Bâb el-Azab, flanked with its huge towers. It was in this narrow and crooked lane, enclosed by lofty walls, and formerly the chief approach to the citadel, that the massacre of the Mamelukes took-place on 1st March, 1811, by order of Mohammed 'Ali (p. oxxviii). Amîn Bey, the only one who survived, effected his escape by making his horse leap into the moat, through a gap in the wall.

The Citadel (El-Kal'a; Pl. E, F, 6), which should be visited repeatedly for the sake of the view, was erected in 1166 by

Ṣalâheddîn (p. cxxii), with stones taken, according to Arabian historians, from the small pyramids at Gîzeh. The site is said to have been selected on account of the fact that meat could be kept fresh here twice as long as in any other part of Cairo. Although the fortress


1. Sultan's Entrance. 2. Kursi, 3, Mimbar. 4. Kibla. 5. Railed Enclosure for the Sultan. 6. Tomb of Mohammed 'Ali. 7. Entrance. 8. Great Gallery, 9. Usual Entrance. 10. Sahn el-Gâmía. 11. Hanefíyeh. 12. Small Fountaín. 13. Ascent to the clock-tower. 14. Point of view. commands the city, its site is unfavourable in respect that it is itself completely commanded by the heights of the Mokattam, rising above it immediately to the S.; thus in 1805 Mohammed 'Ali was enabled, by means of a battery planted on the Gebel Giyûshi ( p .129 ), to compel Khurshîd Pasha to surrender the Citadel.

We enter the inner court of the Citadel by the Bâb el-Gedîd (Pl. F, 6 ; 'New Gate'), and observe on a terrace before us the -
*Gàmía Mohammed ${ }^{\prime}$ Ali (Pl. E, 6), the 'Alabaster Mosque', the lofty and graceful minarets of which are so conspicuous from a distance as to form one of the landmarks of Cairo. The building was begun by Mohammed 'Ali, the founder of the present Egyptian dynasty, on the site of a palace which was blown up in 1824 ; and in 1857 it was partly completed in its present form by Sa'id Pasha (p.cxxix). The architect was the Greek Jusuf Boshna of Constantinople, who, aided by Greek foremen, built it on the model of the Nuri Osmanîyeh mosque at Constantinople. The columns are built, and the walls incrusted, with yellow alabaster obtained from the quarries near Beni Suêf, a building-material known also to the Pharaohs. It is capable of taking on a high polish, but the beautiful yellow tint soon fades when exposed to the sun; the stone also
is brittle and full of holes. The Entrance (Pl. 9 ; where we put on straw or cloth shoes; fee 1 pias.), near the centre of the N. side, leads directly into the Sahn el-Gâmi"a (Pl. 10), or Anterior Court, enclosed by vaulted galleries, in the upper parts of which plain limestone has been used instead of alabaster. In the centre is the Hanefîyeh (Pl. 11), designed in the debased Turkish style. On the W. side is the approach to a tower, terminating in pavilions in the Chinese style, and containing a clock which was presented to Mohammed 'Ali by Louis Philippe of France.

The Interion is entered through the centre of the E. gallery of the fore-court. It consists of a large quadrangle, with Byzantine domes resting on 4 huge square pillars. The size of the place and the manner in which it is lighted produce a very striking impression. The Turkish decoration is unimportant, and the Kursi, Mimbar, and Kibla possess no particular attraction. At the S.E. angle is the Tomb of Mohammed ' $A l i$ (d. 1849), enclosed by a handsome railing (Pl. 6), opposite to which is a space set apart for the Sultan, also enclosed by a railing (Pl. 5).

A magniflcent ${ }^{* *}$ Visw is obtained from the parapet at the S.W. end of the mosque (Pl. 14), which is reached by walking round outside the building. From this point (opposite the Khedivial Palace) we survey the yellowish grey city, with its countless minarets, domes, and gardens. At our feet stands the mosque of Sulṭàn Hasan. To the N. and W. are the windmill-hills and the green plain traversed by the ${ }_{d}$ Nile. To the W., in the distance, are the Pyramids, towering above the desert. On the flat roofs of the houses we observe innumerable air-pipes, called malkaf, known also by the Persian name of bâdgir, by means of which the cool north-wind is introduced into the houses.

The Gàmía Ibn Kaláún (Pl. F, 6), situated to the S.E. of the Mosque of Mobammed 'Ali, was erected in the year 718 of the Hegira ( 1317 A. D.) by Sultan Mohammed en-Nasir ibn Kalâûn. Long used as a military magazine and storehonse, it has recentiy been cleared out, and is willingly shown by the British military authorities. It consists of a very regularly bnilt court, with lofty pointed arcades (some in ruins) resting upon antique columns. The openings over the arcades are of the elongated Moorish form. The comparatively large dome in front of tbe Kibla was once supported by nine magnificent columns of granite, but it has now fallen in, the only remains of it being the deeply sculptured pendentives. The Kibla is handsomely embellished witb miniature arcades, in the interior of which are rich arabesques. The coffered ceiling of carved wood is painted white and gilded, with a blue ground. The windows are still partly filled with tracery in plaster. The minarets, each consisting of a cube with a cylinder above it , are covered at the top with slabs of green porcelain, and are encircled with a band of 'Sullus' characters in white on a brown ground.

Immediately to the S.E. of the Mosqne of Ibn Kalâun is the so-called Well of Joseph (P1. F, 6), a square shaft, sunk in the limestone rock to a depth of 280 ft ., containing somewhat brackish water, which is brought to the surface by means of two sâkiyehs, one above the other, worked by oxen passing $n p$ and down a winding inclined plane within the shaft. Since the completion of the new waterworks (p. 72), however, the well has lost its former importance. When the citadel was constructed here in the

12th cent., the builders discovered an ancient shaft filled with sand, which Salaheddin Yusuf (p. 35) caused to be re-opened and named after himself Yussuf's, or Joseph's, Well. This circumstance gave rise to the tradition, which was chiefly current among the Jews, that this was the well into which the Joseph of Scripture was put by his brethren, and the story is still faithfully repeated by the dragomans.

The Gàmi'a Sulèmàn Pasha (Pl. F, 6), also called Sisarîyeh, on the N.E. side of the citadel, was erected in the year 931 of the Hegira (1526 A.D.) by Sulèmân, the Mameluke, afterwards Sultân Selîm. The architectnre is a mixture of Arabian and Turkish, but the plan is rather Byzantine in character. The mosque is small, but carefully executed. It contains Cufic inscriptions, marble mosaics, and a mimbar in marble.

We return to the Place Sultan Hasan and follow the Boulevard Méhémet-Ali to its intersection with the thoroughfare running $N$. and S. (p. 51 ; the donkey-drivers know short-cuts hither from the citadel). We turn at this point abruptly to the left and enter the Shâri'a el-Ḥilmíyeh (Pl. D, 5, 6), in which three minarets soon come into sight, the two most distant belonging to the Gâmía Shelhhun (Pl. D, 6). At the corner opposite the mosque is the Sebil of the Mother of 'Abbâs I. (Pl. D, 6), in marble, rich and effective in general appearance, but lacking finish in its details. The street now takes the name of Shâri"a er-Rukbîyeh (Pl. D, 6, 7). We follow it for about 300 yds ., and turn down the Shâría Tulûn to the right, in which, after about 70 yds . more, we observe on the right a lane leading to the E. entrance of the -
*Gâmi'a ibn Tulún (Pl. D, 7; pronounced Talûn). This mosque, the oldest in Cairo, was erected by Abu'l-'Abbâs Ahmed Ibn Ṭulûn, the founder of the dynasty of the Tulunides (p. cxxi), in the year 265 of the Hegira (A.D. 879), on the once fortified hill of Kal'at el-Kebsh (see p. 58).

According to one legend the mosque occupies the spot where Abraham sacrificed the ram (kebsh) instead of his son, whence the appellation Kal'at el-Kebsh (i.e., 'castle of the ram'). Another legend points to this as the spot where Noah's ark ran aground on the 10th Moharrem ( $p$. xciii), although the Muslims generally believe that this event took place on Mt. Jûdi near Moşul in Syria (see p. lxxxvii). According to a third tradition the name is derived from the winding staircase which ascends the still existing minaret (see below) in the form of a twisted ram's horn.

The edifice was designed by a Christian prisoner in imitation of the Ka'ba at Mecca, and the whole of the building was constructed of entirely new materials. The walls consist of brick, coated with stucco. The ornamentation, which is in carved stucco (not moulded) and wood, exhibits little of the intricate forms of the developed Byzantine-Arabian style, but rather recalls the antique style of decoration in the way in which its elements are composed. The mosque has been considerably restored since 1891, and the disfiguring additions, built about the middle of the present centory for a poor-house, have been removed. Corbett-Bey has published an interesting monograph on this mosque (Cairo, 1891).

From the N.E. outer court we enter the front arcades of the Lîwân (see p. 58), and thence proceed to the inner quadrangle or

Ṣahn el-Gâmira, 99 yds. square. The Mêda (Pl. 2), in the centre of the latter, is covered by a massive dome, with eight openings. From the cubical substructure the transition to the dome is made in three octagonal stages, each smaller than the one below it. The court is surrounded by a double arcade, except on the S.E. side, where the arcade is quadruple, the pointed arches of which are

a. Entrance. 1. Kibla. 2. Mimbar. 3. Dikkeh. 4. Kursi. 5. Railing and pillars (all of which fell in 1875), separating the Lîwân el-Gâmi‘a (sanctuary) from the court of the mosqne. 6. Mêda. 7. Latrines. 8. Minaret.
9. Sâkiyeh.
slightly depressed and exhibit an almost imperceptible tendency to the horse-shoe form. Pointed arches or niches above the pillars, and a coutinuous frieze carved in stucco lighten and embellish the walls. The pillars are polished and have their corners rounded into quarter-columns, with delicately carved capitals. The shallow relief of the pedestal is concealed under numerous coats of stucco. The roof of the arcades is made of beams of date-palm, overlaid with sycamore wood; but the octagonal filling of the panelling, except in front of the Dikkeh (Pl. 3), has almost disappeared, and is replaced by rough boards. Along the top of the walls runs a frieze of sycamore-wood, inscribed with texts from the Korân. The gratings of stucco in the windows are of very rich designs.

The principal Lîwân, or Sanctuary, originally contained flve series of arcades, but the row nearest the court fell in 1875. A few marble fragments of this arcade, with Cufic inscriptions relating to the building, are preserved in the N.W. arcade. In the Kibla (Pl. 1) we observe two marble columns with capitals of more pronounced Byzantine form. The upper part of the niche is adorned with gilded mosaic, and the lower part with inlaid marble. The poor wooden cupola is probably a later addition. The Mimbar (Pl. 2), erected by Melik el-Manṣ̂̂r in 1298 A.D. ( 696 of the Hegira), was at one time a masterpiece of carving in ebony and ivory; but 20 or 30 years ago the best portions were stolen and sold in Europe, so that now it is but a skeleton, the only parts remaining at all complete being the band on the wall and the door-frames.

The Minaret (Pl. 8), in the N.W. outer court, has an external winding staircase, the design of which is said to have been suggested to Tulun by a strip of paper wound round his finger. The arches in the lower stories display the fully developed horse-shoe arch. The ascent is easy, and the top commands an admirable *View. To the S. are the pyramids of Dahshûr, and to the W. the huge pyramids of Gîzeh; the valley of the Nile as far as the Delta lies before us, to the E. rise the picturesque slopes of the Mokattam; and in the foreground all round lies Cairo, with its houses, mosques, palaces, and gardens. From the minaret access is gained to the asphalted roofs of the arcades, protected by elegaut balustrades; a walk round these is recommended.

Outside the entrance to the mosque we turn to the right, and after about 140 paces, to the right again. Passing the S.W. side of the mosque, and turning a little to the left, we traverse several lanes and alleys, built on what was formerly the hill of Kal'at elKebsh (p. 56), and reach the small, but once handsome -

Gámi'a Kâit Bey (Pl. C, 7), which long lay in a neglected condition, and was only lately saved from complete ruin. This mosque was erected in the Byzantine-Arabian style during the reign of Kâait Bey (1468-96; p. cxxvi), whose tomb (p. 78) it resembles in plan.

The door, with its now fragmentary bronze covering, is about

45 ft . in height. The mosque is about 26 yds . in length and 22 yds. in width. The attics have almost entirely fallen in, but a graceful minaret still exists. Opposite the Kibla is a gallery, serving as a dikkeh, which is accessible from the staircase to the minaret. The principal arches, which approach the horse-shoe shape, though distinctly pointed, are tastefully decorated. The mimbar is richly embellished with wood-carving. The mosaics on the pavement and the walls are also worthy of notice. The roof is open in the middle.

From the W. angle of the Gâmi'a Ibn Ṭulûn, we descend, turning twice to the right, to the Shâría el-Khedêrî (Pl. C, D, 7), follow this street to the right (E.), take the side-street on the left 150 paces farther on, which brings us after 150 paces more to the beautiful mosque of Ezbek el-Yuseff, built in 1496 ( 900 of the Hegira) in the same style as the Gâmira Kâït Bey, and recently restored. The $W$. continuation of the Shâri'a el-Kheḍêrî expands into the Shâri'a el-Marrâsîn (Pl. C, 7), which leads almost straight to the small square and mosque of Mêdân es-Seiyideh Zênab, situated on the El-Khalitg canal.

The Gámi'a es-Seiyideh Zênab (Pl. B, C, 6, 7) was begun at the close of last century, completed in 1803 (in the year of the $\mathrm{He}-$ gira 1216), and enlarged and restored in 1884. The interior, richly embellished with ancient columns, contains the tomb (recently restored) of Zênab, daughter of Imâm 'Ali, and granddaughter of the Prophet (her môlid, see p. ci); the bronze railing enclosing the cenotaph bears the date 1210 (of the Hegira). In front of this mausoleum are the cenotaphs of three Mohammedan saints, beneath a stone canopy.

A series of tortuous streets, called successively Shârǐa es-Seiyideh Zênab and Derb el-Gamâmîz ('sycamore street'), running not far from the canal, leads hence towards the N . to the ( $11 / 4 \mathrm{M}$.) Boulevard Méhémet-Ali. After fully half-a-mile we come to a small open space by the canal, shaded by some fine acacias. The gate on the right leads to the viceregal *Library (Kutubkhâneh, Pl. D, 5), now established in the Palace of Derb el-Gamâmîz, adjoining the left side of the Ministry of Education, founded by the Khedive Isma'il on 24th March, 1870, in the left wing of the office of the minister of public worship. The collection was founded in 1870 by the Khedive Isma'îl and consists of a number of books formerly preserved in various other institutions, and of others purchased or presented by the Khedive, and is dedicated to the use of the public. One of the finest presentations to the collection is the valuable library of Mustafa Pasha, which occupies a separate room. The whole library consists of about 45,000 vols., chiefly Arabic, Persian, and Turkish works. The reading-room is open to the public daily (except Frid.) from 8 to 6 o'clock; during the month of Ramaḍàn from 10 to 3 only. The chief credit of arranging and increasing this fine collection of books belongs to two Germans, Dr. Stern and Dr.

Spitta-Bey (d. 1883); and the present director, Dr. Vollers, is also a German.

The liberality with which the treasures of Muslim literature are thus thrown open to the European public is deserving of all praise. The officials are instructed to afford visitors all the information in their power (no gratuities).

A special feature of the library, possessed by no other Oriental collection available to Franks, consists of the Masahif, or copies of the Korân, the finest of which are exhibited in cases. They are remarkable for their large size, snperb execntion, and great age, and constitnte the finest existing specimens of Arabian art.

The oldest specimen of the Korân is one in the Cufc, or early Arabian, character, 12 inches in length, and $83 / 4$ inches in width. It contains onehalf of the Korân only, and is in a very damaged condition. The titles of the surrehs are bordered with gold, and the carefully written text illnminated with coloured letters. According to the testimony of a shêkh who saw the 'noble book' in its perfect condition this Korân was written by $\theta a^{\prime} f a r$ r es-Sadik, son of Mohammed el-Bakir, son of 'Áli Zên el-c'Abidîn, son of Husền, son of 'Ali, son of Abu Tâlib and son-in-law of the Prophet. Garfar lived in the years $80-148$ of the Hegira, and this Korân wonld thns be about 1150 years old. There is considerable doubt as to the accuracy of this story, bnt the MS. is certainly of very early date.

The other fine large copies of the Korân, about twenty in all, are of later origin, most of them having been executed by order of the sultans of the Bahrite Mamelukes ( $1260-1380$ ) and of the Circassian Mamelukes (1382-1517), while a few of them date from the still later period of the Osman snltans. One of the most interesting of these is the copy of ' $A b d$ er-Razzak, written by 'Abd er-Rahman ibn Abilfath in the year 599 of the Hegira, and dedicated to the mosqne of Husen, $111 / 4$ by $83 / 4$ inches. To the superscription of each sûreh are added both the nnmber of verses and that of the words and letters it contains, besides traditional ntterances of the Prophet connected with the chapter in question, - a most laborious piece of work, resembling what has been done by Jewish scholars in preparing copies of the old Testament.

Next in interest is a Korân of Sultan Mohammed en-Nasivr: ibn Sêfeddin Kalaun (1293-1341), 21 by 14 inches, written entirely in gilded characters, by Ahmed Yusuf, a Turk, in 730 of the Hegira. Several other Korâns date from the reign of Snltân Sha'ban (1363-77), grandson of the last named, and from the time of Khondabaraka, mother of Sultân Shałân. All these maṣâhif are written on thick and strong paper, and vie with each other in magnificence. The designs exhibit no great variety, but they are execnted with the most elaborate care and neatness. The text of these Korâns is provided with red letters written above certain passages to indicate where the tone of the reader's voice is to be raised, lowered, or prolonged. - The collection contains three Korâns of the reign of Sultan Barkuk (1382-99), the oldest of which, executed in 769, measures 41 by 32 inches. It was written with one pen in sixty days by 'Abdervahman esSaigh, the author of a pamphlet, entitled 'Sanā́at el-Kitabeh' ('the art of writing'), and now preserved in this library. This skilful penman was also employed by Farag (1399-1412), the son of Barkûk. From the year 810 dates a fine copy, $381 / 2$ by 27 inches, written by Masa ibn Isma'cil elKinani, surnamed Gagini, for Sultan Shêkh el-Mahmâdi Muaiyad (1412-21). - A copy which once belonged to Kait-Bey ( $1468-96$ ), dating from the year 909, is the largest Korân in the colliection, measuring $443 / 4$ by 35 inches. To the period of the Osman sultans belongs the small mushaf of Safîya, mother of Sultân Mobammed Khân, which dates from 988 . In it à black line alternates with a gilded one, and the first few pages are very beantifully executed. A copy of Husên-Bey Khemashargi, $211 / 2$ by $16^{3} / 4$ inches, is written in a smaller character.

The library also boasts of many other valuable Korâns, chiefly written in the Persian character. One of these, $171 / 2$ by 12 inches, presented by an Indian hokmdâr to the Khedive, has a Persian commentary written in red
between the lines of the text, and is beautifully illuminated at the beginning and at the end. Another copy, presented by a prince of Bukhâra, contains four commentaries, two in Arabic by Bêdâwi and Gelalên, and two in Persian. Another gift of the same donor was the prayer-book' Dalail elKhairat', written on a golden ground, and fnrnished with a Persian translation. There is also a Korân about 9 inches only in length, illuminated with gilded flowers, and dating from the year 1109 of the Hegira. It was written by Mohammed Ruh Allâh, and contains the thirty different parts of the Korân on thirty pages. Each line begins with an alif, the first letter of the Arabic alphabet - a most laborious performance. - The ancient Muslims bestowed the utmost care on these precious copies of the Korân, and their descendants still entertain profound veneration for the sacred volume sent from heaven.

The library possesses many other ancient and valuable MSS., but they are all entirely eclipsed by these Masâhif. They possess, however, great interest for the Arabic scholar, and form the first collection of the kind in the world. Specially noteworthy is the collection of Perso-Turkish Book Illustrations, formed in Constantinople by Mustafa Pasha Fâzyl, brother of Isma'îl Pasha. This branch of art attained its zenith in the 16 th century. The library also contains interesting poetical, historical, astronomical, and geographical MSS. - The erection of a new building for the library has been determined, and the government has voted $38,000 \%$. for the purpose. The site selected is in the Place Abdin.

After visiting the library the traveller may inspect the neighbouring Dervish Monastery of Tekkîyeh Habbanîyeh (Pl. C, D, 5). The monastery was erected in the Turkish-Arabian style about the middle of the 18 th cent. by Muṣtafa Agha, vizier of Sulṭân Selîm. The most interesting object in the establishment is the sebîl, with its projecting rotunda and elaborate façade, its projecting blinds, and the coloured marble and porcelain embellishment in the interior. The building possesses a large court, raised considerably above the street, and containing a few trees. Around the court are the cells of the dervishes, and adjoining it is a small mosque. With regard to the dervishes, see p. xciv.

The Derb el-Gamâmîz ends at the Boulevard Méhémet-Ali, not far from the small square of Bâb el-Khalîg (see below).

## 4. The East Central Quarters.

The following route largely coincides with that through the bazaars, described at pp. 48, 49, but includes visits to the various interesting Buildings between the Boulevard Méhémet-Ali (p. 51) and the Rue Neuve (p.67), which are only referred to on these pages.

The small Prace Bâb fl-Kharîg (Pl. D, 4), near the point where the Boulevard Méhémet-Ali (p. 51) crosses the canal traversing the town, is bounded on the N. by the Palace of Mansur Pasha. Hence a street runs to the N. (left), passing the Gâmi'a el-Benât ('mosque of the girls'), to the Muski; and another to the E. (right) to the ( $1 / 4$ M.) Bâb ez-Zuwêleh (see below), where it intersects the long series of streets traversing the entire E. part of the city from N. to S. and crossing the Boulevard Mohémet-Ali near the Place Sultan Hasan (p. 52). Adjoining the Bâb ez-Zuwêleh on the S. is the Shoemakers' Bazaar (p. 48).

The old town-gate Báb ez-Zuwêleh (Pl. E, 4) is built of solid
blocks of stone and resembles the Bâb el-Futûh (p. 72) in plan. The S . side consists of two huge towers; by that to the right are a number of stone and wooden balls, probably dating from the Mameluke period. Ṭ̂̂mân Bey, the last of the Circassian sultans of Egypt, was hanged outside this gate by Sultân Selîm II., on 19th Rabî̀ elAwwel, 923 of the Hegira (15th April, 1517; p. 37). This gate is also called Bâb el-Mutawelli, from the old tradition that the most highly revered saint Kuttb $\dagger$ el-Mutawelli has his abode behind the western gate, where he sometimes makes his presence known by a gleam of light. A beggar who spends the day here endeavours, by loudly invoking the saint, to excite the compassion of passers-by. From the inner (E.) gate hang bunches of hair, teeth, shreds of clothing, and other votive offerings placed here by sick persons who hope thereby to be cured of their diseases.

Passing through the gate, we enter the street called Sukkarîyeh (p. 48), where on the left we observe the handsome portal of the Gâmi'a el-Muaiyad (Pl. D, E, 4) a mosque which is connected with the gate of the city: This mosque was erected by Sultân Shêkh el-Mahmûdi Muaiyad (1412-21; p. cxxv), of the dynasty of the Circassian Mamelukes, who had once been the leader of the rebellion against Sulṭan Farag (p. 76), and who had been defeated by the sultan and imprisoned for a time in the Bâb ez-Zuwêleh. The edifice is also known as the Gami'a el-Ahmar, or the 'red mosque' from the colour of its exterior. This building was regarded by Selìm I. as the true type of a mosque, the mosque of Hasan (p. 52) being too much like a fortress and that of Ghûri (p. $6 \dot{3}$ ) too much like a sumptuous saloon.

The handsome bronze gate at the entrance originally belonged to the mosque of Sulṭân Hasan (p. 52). There are two other bronze-mounted gates in the vestibule. The plan of the mosque, which originally displayed the usual arrangement of inner court, etc., has been altered in the course of a restoration begun about 30 years ago and still unfinished. Columns of two different kinds were employed. The court is planted with trees and is to be converted into a garden. It is separated by a railing from the recently restored Lîwân, which is richly and tastefully decorated with gilded panels and borders of boldly written texts (notably on the upper part of the back-wall). The marble mosaics and the mimbar, inlaid with

[^24]ivory and silver in red wood, deserve notice. On the right is the mausoleum of the sultan, and on the left that of his family. The two highly elegant minarets, rising upon the towers flanking the Bâb ez-Zuwêleh, were restored in 1892.

Outside the Bâb ez-Zuwêleh, towards the S.E., to the left of the sentry, is the Derb el-Ahmar (Pl. E, 4, 5), or 'red way', recently called Rue de la Citadelle, leading to the Citadel (p. 53). About 150 yds . from the gate, before the road forks, is the mosque of Ishmâs el-Ishâki (Pl. E, 4), in the style of the period of Kầ̈t Bey. About 120 yds. farther is the mosque of Mehmandâr (Pl. E, 4), with an interesting façade, newly restored, dating from the year 740 of the Hegira ( 1326 A.D.). - In the immediate vicinity rises the large mosque of $E l-$ Merdân $\hat{\imath}$ (Pl. E, 5), built in 1340 ( 740 of the Hegira) by Merdânî et-Tambiga, with an imposing portal and a lofty but no longer complete minaret. The mosque is now ruinous and closed (a boy will fetch the keeper). The court contains antique columns. The dome in front of the kibla has collapsed; the granite columns which supported it may be noticed; also the mosaic ornamentation and the characteristic sculpture.

Proceeding from the Bâb el-Zuwêleh to the N. and following the Sukkarîyeh, Manâkhilîyeh, and other streets mentioned in our route through the bazaars (Pl. E, 4; p. 48), we observe after about 100 yds. on the right the modern Sebîl of Mohammed 'Ali, in marble, a fountain of pleasing appearance, though imperfect in its details. To the left, about 270 yds. farther on, where the street now takes the name of $E l--A k k \hat{a} d i ̂ n$ (p. 48), we observe, slightly projecting into the road, the *GAmía el-Ghari (Pl. E, 3, 4), and opposite to it the *Sebill and Medreseh erected by the same founder. The two façades, dating from the secoud half of the 16 th cent. present a very harmonious effect. The walls of the interior are adorned with inlaid figures. A shirt of the Prophet brought by Sulṭân el-Ghûri (p. cxxvi) from Mecca, was formerly shown at this mosque, but it is now said to be preserved in the Citadel.

The Shâri'a el-Ghurîyeh, as the street is called beyond this point (comp. p. 49), ends about 200 yds. farther on in the Rue Neuve (pp. 49, 67), near the uninteresting Gâmi'a el-Ashraf (Pl. E, 3).

Before reaching this mosque, we diverge to the right (E.) by the Shâri"a eş-Ṣanâdikîyeh (Pl. E, 3), in which is the Sûdân Bazaar (p. 49), and passing the corner of the Shâría el-Halwagî, in which is the Booksellers' Bazaar (p.49), reach the handsome main entrance of the *Gami'a el-Azhar (Pl. E, 3, 4), the 'blooming', perhaps so named in referenee to Fâtima ez-Zahrâ, the daughter of the Prophet. It presents few features of architectural interest, and is so shut in by houses that very little of the exterior is visible. The mosque was founded in the year 362 of the Hegira (973 A.D.) by Gohar, the vizier of the sultan Mui'zz, and was converted into a

University in 988 A.D. (378 of the Hegira) by Khal̂̂f 'Aziz Billâh ( p . cxxi), at the suggestiou of his vizier Abu'l Farag Ya'kîb. The successive rulers of Egypt have at all times favoured the institution, partly from scientific, partly from political motives. Thus the building, which exhibits the usual ground-plan of an inner court with numerous side-chambers, has frequently been enlarged in the course of time, notably by Kâ̈r Bey (p. cxxvi), El-Ghûr̂̂, Mohammed ibn Murâd $(1598=100 \dot{4}$ of the Hegira), Shêkh Isma'̂l Bey $(1720=$ 1121 of the Hegira), etc. Extensive restorations were undertaken by Saîd Pasha and the Khedive Tewfik.

The principal entrance (Pl. a), where strangers receive a guide, is on the W. side, and is called Bâb el-Muzeiyinân, or 'Gate of the Barbers', because the students used to have their heads shaved here. To the right of this gateway is the Mesgid Tabarsîyeh (Pl. 2), with a magnificent kibla of 1309 (708 of the Hegira), and to the left are the office of the steward (Pl. 3) in a ruined mausoleum, and the Zâwiyet el-Ibtighâwîyeh (Pl. 4), handsomely restored, with mosaics on the kibla, honeycombed dome, etc.

The long archway, ending in a portal added by Kâit Bey, leads directly into the large $\underset{\sim}{\text { ahn }}$ el-Gâmía, which, unlike ordinary mosque-courts, is completely enclosed by walls. Round the court is an arcade (restored), with Persian keel-arches, niches, open work balustrades, and pinnacles. Beneath this court is a vaulted reservoir, extending also under part of the Eastern Lîwân. This lîwân had originally five aisles, to which the pious 'Abd er-Rahmân Kikhya added four more in the 18th cent., so that the whole lîwân, the principal hall of instruction, with its 140 marble columns (100 antique) covers an area of about 3600 sq. yds. The front and older part is low in the ceiling. The part at the back, to which we ascend by a few steps, has considerably higher arcades, restored a few years ago. The hall is imperfectly lighted. The walls and domes are adormed not unpleasingly in stucco, and the kibla (Pl. 5), between the old and the new parts, should be noted. On the $S$. side is the Tomb of 'Abd er-Raḥmân (Pl. 8). The N. side is bounded by the very elegant Zàwiyet Gôharîyeh (Pl. 9), recently restored.

The ceilings of the Northern and of the Southern Lîwân are supported by double colonnades. The N. Lîwân is adjoined by the Court of Ablutions ( Pl .11 ), with the large Mêda in the centre, built by Kầït Bey.

The great hall for instruction and the other two lîwâns are divided by partitions or railings into Riwaks, or separate chambers (literally, colonnades). Each of these is set apart for the use of the natives of a particular country, or of a particular province of Egypt (comp. the Plan and its reference-numbers 12-22, p. 65). Most of the students are natives of Egypt, so that the Egyptian riwâks (Upper Egypt, Lower Egypt, Eastern Egypt) are the largest, each having several hundred students. About ten years ago the total number of


Gates: a. Bab el-Muzeiyinîn (gate of tbe barbers'), on tbe W.; b. Bab elGothargîyeh ('gate of the jewellers'), on the N.; c. Bab esh-sharba ('Soupgate), on the E.; d. Bab es-Sa'dideh ('gate of the Upper Egyptians'); e. Bab esh-Shuwwdm ('gate of the Syrians'); f. Bab el-Maghârbeh ('gate of the North

Africans'), these tbree on tbe $S$.

1. Entrance Cofrt. 2. Mesgid (mosqne) Taibarsîyeh. 3. Steward's office. 4. Zawiyet (mosque) el-Ibtighdwiyeh. - Lîwân el-Gâmía, now tbe principal hall for instrnction. 5. Kibla. 6. Mimbar. 7. Dikkeh. 8. Tomb of ‘Abd er-Raḥmân Kikhya. 9. Zä̀wiyet Gôhargîyeh. 10. Sebîl. 11. Court of Ablutions, with Mêdâ in the centre, and latrines all round. - 12-22. Riwâks (or rooms for study), named according to tbe old divisions, wbicb, bowever, will be somewhat altered on the completion of the new colonnades. 12. Riwadk et-Turk (Turks from N. provinces of the empire); 13. Riwak elMagharbeh (W. Africans); 14. Staircase to the Riwak esh-Shawwdm (Syrians); 15. Staircase to the Rivodk el-Baghdadîyeh (natives of Baghdâd) and to tbe Riwak el-Hunad (natives of India). 16. Rivolk el-Gabart (E. Africans from the Somali coast, Zèlaf, Berbera, and Tajurra); 17. Staircase to the Riwak el-Mekkiyinn (natives of Mecca); 18. Rivak esh-Sharakweh (natives of the province of Sherkiyeh); 19. Rivodk el-Fashniyeh (natives of Fashneh); 20. Riwak es-Sadanniyin (natives of the Sûdân); 21. Rivak el-Balabiseh (natives of Lower Egypt); 22. Riwak el-Hanafiyeh (Hanafites; see p. xciii). - 23. Steps to the Terrace. 24. Gate of the Okeila Kâït Bey (ruinous but interesting façade).

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students was 7600-7700, taught by 230 professors; but since the British occupation the numbers have sensibly diminished, especially as no students now come from the former equatorial provinces of Egypt. Bat the university of Cairo is still the largest in the domain of El-Islâm. - The nationality of the various groups of students may be learned from the guide. This being one of the foun-tain-heads of Mohammedan fanaticism, the traveller should, of course, throughout his visit, be careful not to indulge openly in any gestures of a musement or contempt.

The Strodents (Mugâwivin) usually remain three, and sometimes from four to six years in the mosque. They pay no fees, but each riwâk is supported by an annual subsidy from the endowments of the mosque. There is also a separate riwâk, called the Záwiyet el- $\cdot$ Omyan, for blin $\mathfrak{z}$ stndents, for whose maintenance a portion of the funds is set apart. These blind youths, who have a shêkh of their own, were frequently guilty of riotous c n luct in forme: years, and used to parade the streets armed with bludgeons, whenever they conceived their rights infringed, the disputes being ganeally cincerning the quality of their food. To this day they are said $t$, be the most fanatical of their sect, and $t$, entertain the most bitte: hatred and contempt for the kâfir, or unbelieving Christian - The ProFessors, or Shêhhs, receive no salary, either from the mosque or from government, but snpport themselves by teaching in private houses, by copying books, or by filling some religious office to which a salary is attached, and they occasionally receive donations from the wealthier students. When teaching, the shêkh sits cross-legged on a straw-mat and reads from a book placed on a desk (rahleh) befure him, explaining each sentence as he proceeds; or he directs one of the more advanced students to read alond, adding his own explanations from time to time. The students sit in a circle around the teacher, listening, or attentively taking notes. As soon as a student knows by heart and can explain the whole of the book which is being studied by the class, the shekh makes an entry in his copy of the work, called the Igazeh, whereby authority to lecture on the book is conferred on the student himself. The president of the university, who is usually the most distinguished of the shêkhs, is called Shêkh el-Azhar, and receives a salary of about 20 purses, i.e. 10,000 piastres.

Most of the students, particularly those whose native tongue is not Arabic, begin their university education by learning the Arabic grammar ('ilm en-ncilu). The next branch of study is religious science (ilm elkelâm), the introduction to which consists of a series of preparatory lectures on the attributes of God and the prophet (cilm et-tauhid, i. e. the doctrine of the unity of God). The chief attributes of God are said to be the following twelve: existence, source of all being, eternity, independence, unity, omnipotence, will (in accordance with which he rules the universe, man being powerless to save himself from sin or to be pious without the assistance and grace of God), omniscience (or knowledge of everything that happens between the lowest foundations of the earth and the loftiest heights of the firmament), life, vision (which enables him to see everything everywhere, without the aid of light, and without eyes), hearing (without ears, in the same way as he knows without a brain, and overthrows without hands), and speech (in a language that has had no beginning, a language without letters or sounds, which is inherent in his nature, and does not resemble human speech).

After having completed his course of religious instruction, the student proceeds to study law ('ilm el-fikh).
'Jurisprudence', says Ibn Khaldûn, one of the greatest of Arabian thinkers, 'is a knowledge of the precepts of God in relation to the actions of men, some of which it is our duty to perform, while others are forbidden, or recommended, or permitted; and this knowledge is derived from the book of God, i.e. the Korân, f:om the Sunna (i.e. tradition), and from the inferences drawn by the lasigiver (Mohammed) from suf-
ficient materials afforded by the Korân'. The study of law is therefore based upon the exegesis of the Korân (tafsîr) and of tradition (hadîth).

The science of law is divided into two branches: -
(1) The doctrine of the Chief Religious Commandments of El-Islâm, viz. (a) Et-Tauhid, or the recognition of God's unity and of Mohammed as his prophet; (b) The SSalat and Tahara, or the duty of repeating the canonical prayers in connection with the ablutions; (c) The $S a d a k a$ and Zakât, or giving of alms and payment of a religious tax; (d) The Siyäm, or fasting during the month of Ramadân ; (e) The Hagg, or duty of performing a pilgrimage to Mecca.
(2) The doctrine of Secular Law, civil and criminal, either as expressly laid down by the Korân, or as deducible from it. The legal literature again is divided into two classes, one embracing systematic expositions of the law of the Koran, and the other consisting of the decisions (fetwa) and opinions of celebrated jurists in special and difficult cases.

Besides these leading branches of instruction, logic ('ilm el-mantik), rhetoric ('ilm el-ma'dni wal bayân), the art of poetry ('ilm el-‘arad), the proper mode of reciting the Korân ('ilm el-kivî'a), and the correct pronunciation of the letters ('ilm et-tejwid) are also taught.

The above list of the subjects taught at the most important of Mohammedan schools will serve to convey an idea of the intellectual condition of Orientals at the present day. The most conspicuous defect of their culture consists in the entire absence of independent thought, in consequence of which they are the mere recipients of the knowledge of the past. Their minds are thus exclusively occupied with the lowest grade of intellectual work, their principal task consisting in the systematic arrangement or encyclopædic compilation of the knowledge handed down to them. Some of the shèkhs of the Azhar are men of marvellous erudition, but they are destitute of creative power, or of the ability to utilise their old materials for the construction of any new edifice, and they adhere faithfully to the notion of their forefathers that the greatest triumph of mental labour is to learn by heart any work of acknowledged literary value. Doubt and criticism, which so often serve to open up fresh sources of knowledge, are unknown to them; with natural history they are entirely unacquainted; and even geometry, algebra, and astronomy, so assiduously cultivated by the ancient Arabs, have now fallen into oblivion. So well satisfied are they, moreover, with their own wisdom, that they utterly despise the scientific pursuits of the Western world.

The Shârïa el-Halwaĝ (pp. 49, 63) leads past the University to the Rue Neuve (p. 49). - At the E. extremity of the Rue Neuve, about $1 / 2 \mathrm{M}$. from this point, is the Windmill Hill (View; p. 79), near which passes the route to the so-called Tombs of the Khalifs.

## 5. The Northern Quarters of Cairo.

The following section deals principally with the interesting edifices in the N.E. part of Cairo, to the N. of the Rue Neuve, the continuation of the Muski (p. 47). The route here described connects at the Mashhad elHeseinî (see below) or the Shâri'a Khordagiyeh (p.69) with that described in Section 4, while the first part of it coincides with the description of the bazaars at pp. 49-51. - The N.W. portion of Cairo (p. 75) contains little of interest.

The Míashhad el-Heseini, a side-street of the Rue Neuve (p. 49), leads N. from the end of the Shârica el-Halwagî (see above) to the mosque of El-Hasanein, with its handsome minaret.

The *Gami'a el-Hasanein (Pl. E, 3), the mosque of Hasan and Husen, the sons of 'Ali, the son-in-law of the prophet (p. xovii; the termination cin indicating the dual), is of no architectural importance, while it has been almost completely modernized, even to the
introduction of gas-lighting. The chief attraction, quite inaccessible to all but Muslims, is the mausoleum which is said to contain the head of Husên, who was slain at Kerbela by Shemîr Ibn elGaushan by order of Yezîd. The head is said to have been brought to Cairo in a green silk bag. This tomb-mosque is chiefly frequented by men on Thursdays, and by women on Saturdays. +

The battle of Kerbela, at which Husên fell, took place on 10th Moharrem of the year 61 of the Hegira (10th Oct. 680). Historians record that Husên's head was sent to Damascus, while his body was interred in the Meshhed Husên on the N.E. frontier of Persia, to which Persian pilgrims still resort in great numbers.

Neither Hasan nor Husên was remarkable for moral worth or political greatness. The veneration paid to these young 'saints' seems to have sprung solely from the persecutions to which the whole family of 'Ali was subjected, coupled with the fact that they were the grandsons of the prophet. Their misfortunes doubtless at first excited pity, a feel-

[^25]ing which led to their being honoured with a kind of deification, particularly in Persia, where divine honours had at a still earlier period been paid to the sovereigns of the country as being descended from the gods. It is still the custom in Persia, during the month of Moharrem, to represent the events which led to Husên's death in nine successive theatrical performances, somewhat resembling the Passion pays of Europe.

Opposite the egress of the mosque is the entrance to the Khân el-Khalîl (p. 49), through which we proceed to the W. to the Shâría Khordagîyeh.

The Shâría Khordagitrb (Pl. E, 3; p. 50) is the N. continuation of the great line of thoroughfares (pp. 51, 61) intersecting the Rue Neuve (p. 49) near its middle. As we enter it from the Rue Neuve we notice, on the left, three mosques, adjoining each other, with staring red and white striped or checquered façades and lofty minarets. The first of these is the -

Mưristân Kalâañ (Pl. E, 3), once a vast hospital ('mûristân',

a. Principal Entrance, from the street En-Nahhâsin. b. Gate of the Mausoleum. c. Back entrance. 1. Mosque. 2. Court of Ablutions. 3. Vestibule to - 4. Mausoleum of Sultan Kalâûn. 5. Court with colonnade, in which the physicians interviewed patients. 6. Modern eye-hospital. 7. Former court, with cells for the insane. 8. Minaret.
from the Persian word bîmaristân), the greater part of which is now in a ruinous condition, and used as a workshop by coppersmiths and tinkers. The tomb of the founder, however, and the small mosque opposite (recently restored) are tolerably preserved. The foundation-stone was laid by Sultân el-Mansûr Kalâûn (p. cxxiii) in the year 683 of the Hegira ( 1285 A.D.), and the whole edifice is said to have been completed within thirteen months. The Mûristân, the largest monument of its period, is of considerable architectural interest. Many of its details, especially the windows, recall the Romanesque style of Europe. The adjoining plan represents the edifice in its original condition, when there was a separate ward for every known disease, besides lecture-rooms for students and an orphanage. Now, however, decay and alteration have so changed the building that only the wards surrounding the principal court can be confidently identified.

The Portal (Pl. a), the most interesting part of the whole edifice, is constructed of black and white marble, and is of imposing height. The doors still show traces of their former covering of bronze. The ceiling of the entrance, with its open beams, is also very effective; the other corridors are vaulted in the Gothic style. The second door (Pl. b) on the right leads to the Vestibule (Pl. 3) of the Tomb of Kalâun (Pl. 4). The tomb itself contains fine granite columns, which once supported the dome. The kibla (prayer-recess), with its mosaics, its beautiful dwarf-arcades, and its shell-shaped ornamentation, is also worthy of notice. The marble and tortoise-shell oruamentation of the lower parts of the walls, once the finest in Cairo, is now almost completely ruined by incrustations of saltpetre. In the tomb-chamber are still preserved articles of dress which once belonged to Kalâûn and are popularly supposed to possess miraculous healing virtues.

Adjacent to the Mûristân, as the second of the three edifices mentioned at p. 69, is the *Tomb of Mohammed en-Nasir ibn Kalàtin, erected by that sultan (p. cxxiv) in the year 698 of the Hegira (1300 A.D.). The late-Romanesque portal, in marble, with its round arch, has Arabian carving on the architrave. It was origginally erected at Acre in Syria, after the destruction of which it was transferred to Cairo in A.D. 1291 by the Egyptian Mameluke Sultàn El-Ashraf (p. cxxiii) as a trophy of victory. The only object of interest in the interior is the well-defined and beautifully moulded Arabian stucco-work, remains of which are preserved.

The third large building is the *Barkakiyeh, the Medreseh of the Sultân Barkûk (1382-99; p. cxxiv, which also contains the tomb of the daughter of Barkûk. It possesses a marble portal and a bronze-mounted door. The accompanying plan shows the modification of the original cruciform ground-plan. Only the chambers for prayer and instruction are preserved (recently restored). The back of the mosque is in ruins.


Medreseh of Sultan Barkûk (Barkệ̂íyeh): 1. Principal entrance. 2. Corridor. 3. Tomb of Barḳ̂ḳ's daughter. 4. Cuurt for Ablutions. 5. Sâkiyeh.

Opposite these three mosques is a modern sebîl. Continuing to follow the Sûl en-Nohhûsin (p. 51), the continuation of the Khordagîyeh, which is generally enlivened by busy traffic, we come to the Sebil 'Abd er-Rahmân Kikhya, at a fork of the street, with pretty fayence decorations and a kuttâb below it. Hence we command a striking retrospect, with the three red and white mosques and their minarets to the right, and, to the left, the huge façade of a palace said to have once formed part of the palace of the Khalîfs. - The Shâría en-Naḥhâsîn leads straight on to the Bâb el-Futûh (p. 72).

Passing to the E. of the fountain, we reach the Shûría el-Gamâlîyeh (Pl. E, 3, 2), which, before the opening of the Suez Canal, was the seat of the wholesale trade of Cairo in coffee, mother-ofpearl, incense, attar of roses, and other wares from the Red Sea. The finest of the okellas (p. 43) here, which present no great attraction, is the Okella Zulfikâr Pasha, opposite the corner where our street bends to the N. The entrance, with a kind of star-vaulting, and the court, with its colonnades and mushrebîyehs, should be noticed. To the left, at the corner, is the Medresch Gamaliyeh, with a late-Romanesque gateway, perhaps a copy of the gateway from Acre ( $\mathbf{p} .70$ ), but the original form of which is now scarcely traceable owing to the restoration and bedaubing it has undergone.

At the back of this school is a tomb-mosque. Following the lane towards the N . for about 500 paces more, we reach the Okella Kẫ̈t Bey, a secular building of the 16 th century. The studious simplicity of the façade, with its sparingly decorated main portal, its continuous beams, and oriels, produces a pleasantly harmonious effect. One of the former locks of the shops is preserved in the Arabian Museum (p. 73). - Tarning now to the right we find ourselves in front of the -

Bâb en-Nasr (Pl. E, 2), or 'Gate of the Help of God', which is connected by the ancient city-wall with the similar Bábel-Futuh, or 'Gate of Victory', 150 yds. to the $W$. These two gates form the strong N.E. extremity of the old city-fortifications. Together with the fortifled mosque of Sultân Hâkim situated between them (see below), they formed a strong position for the troops of Napoleon in 1799. These gates, the most important of the sixty which once existed in the walls of Cairo, were erected by the vizier Berd Gamali in the 11th century. Their plan resembles that of ancient Roman gateways. Both have an outer and an inner gate, flanked by square or round towers, and united by means of a vaulted inner court (the Roman 'propugnaculum'). The Bâb en-Naşr in particular is built of well-hewn stone, and has vaulted winding staircases in the interior, groined vaulting in the gateway, girders with a kind of hatched moulding, and cornices with a corbelled frieze.


Bab el-Futah. (From the side next Bàb en-Naş. (From the side next the town.)

In the Mohammedan cemetery outside the Bâb en-Nasr is buried Johann Ludwig Burckhardt (d. 1817), known to the Arabs as 'S̉hêkh lbrâhîm', the distinguished Oriental traveller, whose works are still of high authority. - The two towers with iron basins, which we observe on the left, belong to the City Water-Works, constructed in 1865-66 and several times enlarged. The water is pumped up from the Nile by steam.

The street running to the $N$. from the Bâb el-Futûh leads straight to the Bâb Huseinìyeh (p. 75). Re-entering the city by the Bâb el-Futûh, however, and proceeding for about 50 paces to the left, we reach the entrance of the -

Gámi'a el-Hákim (Pl. E, 2) erected in the year 393 of the Hegira (A.D. 100 ), on the plan of the Gâmi'a ibn Ṭulûn (p. 56), by

Khal̂̂f El-Hâkim ibn 'Azîe, of the Fâtimite dynasty (p. cxxi). This mosque is much less carefully and artistically built than its model. The whole building occupies an area about 400 ft . long and 350 ft . wide. The great court was adjoined on the side next the sanctuary by five aisles or arcades, on the W. by two, and on the N. and S. by three. Until 1879 a chamber in the sanctuary was still used for prayer, but the rest of the building was in ruins. The mosque, however, has now been cleared of debris.

A building on the S . side of the court, originally intended for a school of industrial art, now contains the new *Arabian Museum, consisting of objects of artistic or antiquarian interest from ruined mosques and secular buildings of Cairo, collected here by the zeal of Franz Pasha, formerly technical director under the Wakf ministry (p. 33). The Arab tombstones formerly preserved in the Egyptian Museum were added in 1890. Some of the possessions of the museum are stored in the two magazines adjoining the main building; and even in the main building itself the arrangements hardly correspond to the great value of the collection. The museum is open daily, except Frid., from 10 to 4; during Ramaḍân in the afternoon only. Two MS. catalogues in French are provided for the use of visitors in each room. A printed catalogue is in preparation.

Room I. Marble and other Stone Carvings. 19. Marble slab from the mosqne of Bedrîyeh (14th cent.); 23, 24. Water-vessels from the Sebîl Farag and from the mosque of Tatar el-Hegasîyeh (14th cent.); 31. Marble slab of Arabic-Persian workmanship, with plant and animal ornamentation; 38. Perforated Byzantine capital (mouth of a cistern); 40. Two antique serpentine colnmons from the kibla of Kusun el-Saki (d. 1329); 45. Heraldic eagle in a frieze, from the Bâb esh-Sharîyeh (now destroyed); 52. Cnfic inscription from Koss in Upper Egypt (999 A. D.) ; 71, 72. Heraldic eagle from the pavement of a bath; 93. Chandelier with 110 lights from the mosqne of Sultan Hasan; numerous tombstones, tshahids, and portions of sepulchral monuments.

Room II. Brass and Bronze Objects. - 57. Korân-case, with elaborate brass cover and silver ornamentation (these boxes have always 30 compartments arranged in three rows for the 30 books of the Koran); 4, 6. Vases with lids, from the mosques of Hasan and Barkûk; 61, 62. Votive gifts of Sultan Mustafa (d. 1623) to the mosque at Tanta (p. 24); 109. Hanging lamp from the mosque of El-Ghûrî; crescents from domes and minarets, door-mountings, candlesticks, plaques, etc., many from the mosque of Ezbek (p. 45).

Room III. *Enamelled Hanging Lamps from Mosques; most of them made of common green glass, with enamelled garlands, serpents, inscriptions, medallions, etc. These were used as ornaments, not, like the Thoraia, Fânûs, and Kandîl (p. cxcviii), for lighting-purposes, and are seldom older than the 13th century. The place of manufacture is unknown. Only about a hundred of these lamps are now extant, and most of them are in this musenm. About 25 or a fourth of the total are from the mosque of Snltan Hasan, 9 are from the Barkûkîyeh, 5 from Khawand el-Baraka, 4 from Alti-Barmak, 3 from Ezbek el-Yûsef, 2 from Kâit Bey, 1 (No. 8; perhaps the oldest of all) from Saleh Aiyûb, etc. A similar lamp of modern Parisian workmanship is also exhibited here. Nos. 111 and 112 are a pair of pyramid-shaped Fânûs (p. cxcviii), from the mosque of Kâit Bey in the Fayûm.

Room IV. Inlaid and Mosaic Work in Wood, Ivory, etc. - 49, 50. Portions of a cenotaph (12th cent.), from Imâm Shâferi (p. 80); 54 (in the corridor), Fragment of the architrave of the oldest door in the collection.

The tabernacle-shaped portable wooden Kiblas should also be noticed, on which Byzantine leaf-ornamentation occurs, alongside of the fully developed Arabian inscription-ornamentation. The best specimens are the inner side of the back of No. 59 (from the mosque of Sitteh Rokaia) and No. 33 (from the mosque of Sitteh Nefiseh; both granddaughters of the Prophet), probably of the 12 th cent. after Christ. 55, 56, 57. Three Kursi (reading-chairs or Korân-desks), from the mosques of Ghûrî and El-Azhar ; 58. Door from the mosque of Ashrafîyeh; "65. Korân-case, inlaid in the Persian-Indian taste, with elegant hinges, from the mosque of Khawand el-Baraka; high Kursi, belonging to this case.

Room V. Inliad and Mosaic Work continued. - 36. Kursi adorned with mosaic and turned work, from the mosque of 1shmâs el-Ishaki (15th cent.); 19, 20, 34. Panels from the mosque of Ibrâhîm el-Bushami at Denûk; 2. Student's cupboard, from the mosque of el-Azhar; 26. Donrframe from the convent-mosque of Sultan Beibârs Geshankir (Khanka); 28. Central piece of the covering of a sebîl from Käit Bey; 42. Star-shafed Kursi, with Korân-case, from the mosque of El-Ghûrî; the ornamental leather-work should be noticed.

Roon VI. Fayence and Stoneware. 64 (in the glass-case),. Cornelian Dish, a beautiful specimen, $173 / 4$ inches in diameter and 4 inches high, with 19 cut facets on the edge, from the former maqazine of Mûristan Kalâùn. 29-33. Hanging vases, in stoneware; 35 Fayence plaque with a representation of the Karba of Mecca (made at Danascus in 1726). Nos. 39, 41. $43,44,53$ are noteworthy specimens of fayence from mosques, with large 'Sullus' characters. and are perhaps of Persian origin. - Fayence from Naples and Asia Minor (e.g. the tiles No. 49).

Room VII. Inlaid and Mosaic Work in Wood, Ivory, etc. - Mushrebîyehs and panelling from secular bnildings. Also, 14. Railing from a dikkeh; 32, 33. Kursi from the mosque of El-Muaiyad; 11. Chandelier with 374 lights, from the mosque of El-Ghûrì; 12, 13. Chandeliers, with 222 and 86 lights respectively, from the mosque of Sultan Hasan.

Room VIII (meeting-room). In the cabinet, Arabian bookbindings. To the right -

Corridor. At the $E$. end, portions of ceilings (chiefly from the mosques of Merdâni, Barkûkîyeh, and Ghûrî), cornices, brackets. 23. Ornamented ceiling, with stucco-reliefs between geometrical figures, a style of decoration effective enough at a certain height, but passible only in the climate of Egypt. 58, 71. Shop-fastenings from the Okella of Kait Bey (p. 72): 9. Kamarûyeh and Mushrebîyehs; 7. Door from the mosque of Tatar el-Hegasîyeh; *55. Gate of the medreseh of Salah-ed-Din Ayûb (13th cent); 5. Single-leaved door from the mosque of El-Azhar; *4. Door from the Mûristàn Kalâûn, the oldest door in the collection. probably taken from the ruins if the palace of the Fatimites and barbarously patched up for its later position; 1. Gate from the mosque of El-Hâkim, with reliefs resembling those of the mosque of Tulûn. Also, large midern gate (18th cent.) with incised geometrical designs, from an Okella at Damietta.

In the Magazines to the right of the entrance are numerous other objects of great interest, generally of considerable size, including tombstones, cenotaphs, mimbars, kursis, and gates.

The street coming from the Bàb el-Futûh, which farther on is named Shârica el-Barrânî (Pl. E, 2) and then Shâría en-NAHHÂSîn (Pl. E, 2, 3), leads to the three red and white mosques mentioned at p. 69, and to the Rue Neuve.

In a crooked side-lane, about 250 yds. to the $W$. of the Shâría en-Naḥhàsîn, lies the mosque of Abu Bekr Mazhar (Pl. D, E, 2), built in the year 884 of the Hegira (1480 A.D.) by El-Zeini Abu Bekr, chancellor of the Sultan Kàit Bey. This mosque is distinguished for its rich and tasteful marble mosaics and for its peculiarly incrusted marble slabs, on which the design was first


lightly chiselled, then flled in with a resinous substance, and finally smoothed and polished.

The remaining features of the $\mathbf{N}$. quarters are of little interest. The principal thoroughfare is the Shâri"a or Boulevard Clot Bey (Pl. $\mathbf{C}, \mathbf{B}, 2$ ), which runs to the N.W. from the little square of Mêidàn elKhaznedàr, at the N.E. angle of the Ezbekîyeh (p. 45), to the Lêmûn Bridge and the Railway Staticns (p. 27). The open 'place' in front of the bridge is known as the Rond Point de Faggâla (Pl. B, 1,2). At the end of the Shâri‘a Bàb el-Hadîd, which also leads hither from the W. side of the Ezbekiyeh, is the handsome Sebill of the Mother of Ismaîl Pasha (Pl. B, 2). - The third street debouching at the Rond Point is the Faggâla Street, from which, a little farther on, to the left, diverges the cAbbâsìyeh Road (Pl. B, C, 1, 2), pleasantly shaded by lebbek-trees. Until about 1870 this road was flanked with large heaps of rubbish, but these have now given place to villas and gardens, among which huts of all kinds still linger. Immediately after crossing the city-canal, the 'Abbâsîyeh road skirts the former mosque of Ez-Zâhir or Ed-Daher (Pl. D, E, 1), which was called by the French Fort Sulkowsiy, and is now a guard-house. A few paces beyond this building we reach the Bâb Huseiniyeh (P1. E, 1), marking the N. limit of the city, 900 yds . to the N. of the Bàb el-Futîh. (p. 72). - From the Bâb Ḥuseinîyeh to 'Abbâsîych, see p. 93.

To the $N$. of the mosque of Ed-Daher, outside the city, is the large Slaughter-House.

## 5. The Immediate Environs of Cairo.

The most interesting points in the immediate neighhourhood of Cairo may all be reached hy Curriage ( p .30 ); but travellers who use Donkeys will be more independent among the tombs of the Khalîfs and elsewhere.

## 1. The Tombs of the Khalîfs and the Mamelukes.

> A visit to the Tombs of the Khalifs (and to a certain degree to the Tombs of the Mamelukes also) is exceedingly interesting, especially towards sunset, owing to the very novel and curious picture they present. Tickets of Admission, see p. 33 .

The large and superb mausolea of the 13-16th cent., which, under the names Tombs of the Khalifs and Tombs of the Mamelukes, stretch along the entire E. side of the city, were erected by the Bahrite (1250-1380 A. D. or 647-780 of the Hegira) and Circassian Mameluke Sultans (1381-1517 A. D. or 781-923 of the Hegira). The name 'Tombs of the Khalîfs', applied to the northernmost group, is historically a misnomer, for the tombs have no connection with the 'Abbaside Khalîfs then resident in Egypt (p. cxx) and treated as mere titled puppets. All the tombs were once richly endowed, each being provided with a numerous staff of shêkhs and attendants, who with their families resided within their precincts. The revenues of the mosques having been confiscated at the beginning of the pre-
sent century, the tombs gradually fell to ruin. At present, however, the Committee mentioned at $p .33$ has taken them into its keeping. The descendants of the mosque attendants and other Arabs have established their quarters among the ruins, and the old necropolis has thus been converted into a kind of suburb of Cairo, the inhabitants of which often pester strangers with their importunities.

The usual route (very dusty) to the *Tombs of the Khalifs leads through the Bâb en-Nasr (Pl. E, 2; p. 72), past the Mohammedan cemetery and the reservoir of the water-works (p. 72). To the right is the so-called Windmill Hill ( $\mathbf{p}$. 79). Beyond the unimportant tomb of Shêlh Galall, we have one of the finest *Views of the city of the dead.

The N.E. group of these mausolea (on the left when approached from Bâb en-Nasr) consists of the Tomb of Sultân Abu Sa'îd Kanşuweh el-Ghûrî (p. 63), a cube surmounted by a stilted dome, and the tomb-mosques of Sultân el-Ashraf, with a handsome minaret, and of Emîr Yûsuf, son of Bursbey (see p. 78). We leave these to the left, and proceed in a straight direction to the -
*Tomb-Mosque of Sultan Barkak (p. 70), with its two superb domes and its two minarets, built by Sherkis el-Haranbuly. The accompanying plan (p. 77) will convey an idea of the original building, of which the greater part is still standing, though its effect is marred by the necessary props and braces. The present Entrance (Pl. 1) at the S.W. corner is in a ruinous condition. The Principal Entrance (Pl. 18) at the N.W. angle, now closed, has a stalactitic vault. The Vestibule (Pl. 2) of the S. façade, through which we reach the interior, has a fine star-shaped dome, and now contains the Hanefiyeh, or fountain for ablution, which was formerly in the Șạ̣n el-Gâmía or large inner Quadrangle. Beneath the larger (N.E.) dome (Pl. 12) are the tombs of the male members of the family; viz. the Sultân Barkûk (p. 70), his son Farag (p. cxyv), and a brother of Farag, who reigned seventy days only. On the edge of Barkûk's tomb are pebbles, which, when rubbed on sandstone under water, are believed by the Muslims to communicate sanatory properties to the discoloured water. The S.W. dome (Pl. 13) covers the tombs of the female members of the family. The Mimbar (Pl, 6), one of the most beautiful existing specimens of Arabian sculpture, was presented by Kâït Bey (p. 58), but it is protected from falling stones from the ceiling by a wooden covering which prevents it being seen. - The Minarets, with their two galleries (besides the balconies below them), have stalactitic cornices. Each had a third gallery which had to be taken down owing to the dilapidation of the towers. - The symmetrical plan of the ediffice, its massive masonry, and the symmetrical disposition of the rows of pilasters with domes, constitute this mosque one of the most perfect examples of Arabian architecture in existence;

$\qquad$ Kait Bey



and, notwithstanding its ruinous condition, it still presents a most imposing appearance.

To the W. (right) of this tomb-mosque, within a walled court, is the Tomb of Sultân Sulêmân ibn Selîm (1526 A.D.; 931 of the Hegira), containing interesting sculpture in the dome and inscriptions in fayence, now partly destroyed. 'To the E. of this tomb (and to the S. of Barkûk's mosque) is another handsome domecovered tomb, the founder of which is unknown; and there are other interesting dome-structures of various forms, carefully executed, but of uncertain origin. Adjoining the mausoleum of Sulêmân is the tomb of the Seb'a Benât ('seven maidens'). The dome, with its peudentives, is of a very elongated form, and differs considerably from those of the neighbouring mausolea, being more like those of the so-called Mameluke tombs (p. 80).

Opposite the last-named tomb, to the E. (left), is the TombMosque of Bursbey (Berisbai; p. cxxv), completed in 1431 (834 of the Hegira). Various data regarding the building of the mosque and the legacies bequeathed for its preservation were engraved on a long marble frieze on the okella which adjoins the edifice on the right, and a considerable part of it is still to be seen. The Lîwân contains good mosaics. Some of the handsome perforated stucco windows are still preserved, but the bronze gratings have been removed, and the openings built up. The admirably executed gateway with its pendentives, and the wall enclosing the three monuments of princesses, were erected by Mohammed, an intendant of the Hôsh, about the year 1142 of the Hegira ( 1730 A.D.).

Adjoining the mosque is the Ma'bed er-Rifâi, a mausoleum with a remarkably depressed dome, next to which is the Tomb of the Mother of Bursbey, a poorly executed work. The form of the arches in the latter is worthy of notice, as the arches with straight sides, placed below an acute angle, though not uncommon, seldom occur quite alone. The oldest arches of the kind are to be found in the Amru and Azhar mosques.

In the same street, a few paces farther to the S., we observe on the right the long Okella Kâ̈t Bey, now in ruins, with its carefully executed gateway and characteristic ornamentation. The façade is built of massive stone, and is tolerably regular, but the mushrebîyehs are of inferior workmanship and probably of later date. The gate is mounted with large iron nails. The ground-floor is vaulted, while the upper fioor has an open ceiling. The edifice was completed in the year 879 of the Hegira (1473 A.D.).

A little farther to the S ., projecting in an angle, is a public fountain, now in ruins and usually dry, also erected by Kâït Bey. The shallow niches, the upper parts of which are shell-shaped, are in the form of fantastic arches.

Beyond this sebil is an open space, on the right side of which is the "Tomb-Mosque of Käit Bey (p.cxxvi), the finest edifice among
the Tombs of the Khalifs, which is distinguished from all the others by its lofty dome adorned with bands of sculpture, its peculiar and effective lighting by means of about fifty coloured windows, and its slender minarets with elegant galleries. The Sahn el-Gâmi'a was once closed by a mushrebîyeh lantern, which fell in 1872. The original ceiling is only partly extant, the greater part is modern and poorly restored. Within the mausoleum are shown two stones, which are said to have been brought from Mecca by Kâit Bey, and to bear impressions of the feet of the prophet; a finely carved kursi for the Korân; and beautiful ivory carvings in the canopy over the tomb. (These are not always visible, as the mosque-attendant sometimes keeps them covered from allxiety as to their preservation.)

With a visit to this mosque the traveller may conclude his inspection of the great necropolis. Those who are not fatigued may now walk towards the Citadel (p. 53), examining the differentḥôshes, domes, and


Tomb Mosque of Kâit Bey. - 1. Principal Entrance. 2. Sebîl with Kuttâb 3. Minaret. 4. Sahn el-Gâmi'a. 5. Lîwân with Kibla and Mimbar. 6. Mausoleum. 7. Tomb of Kâĭt Bey. 8. Dikkeh. smaller monuments on the right and left. To the right of the road to the Citadel is a point (marked on our Map, p. 76) commanding an admirable *Retrospect of the necropolis.

The traveller who quits the Tombs about sunset should not omit to ascend the so-called **Windmill Hill, one of the finest viewpoints in the immediate neighbourhood of the city, and well worth repeated visits, especially as its position close to the end of the Rue Neuve ( $\mathbf{p} .49$ ) renders it very easy of access. A fine effect, especially by evening light, is produced by the domes and the peculiar colouring of the valley and the opposite heights of the Mokatțam. To the W. are the city, the plain of the Nile, 'and the Pyramids. The red building to the N.E. is the 'Abbâsîyeh (p.93), to the left of which is a mosque (Gàmi'a el-'Adil). In front of the latter is the N.E. group of the Tombs of the Kbalîfs (p. 76), a little to the right
of which are the two minarets of Sultân Barkûk (p. 76). Beyond these rises the Gebel el-Ahmar (p.93), adjoining which are the Mokatṭam hills, with the other Tombs of the Khalîfs at their base.

The Windmills were erected by the French, bnt have long stood unused, as the Arabs prefer to grind their corn in the houses in handmills (râha). The only windmill in nse is one to the $S$. of the town.

The Tombs of the Mamelukes, to the S. of the Citadel, are most conveniently visited viâ the Bâb el-Karâfeh (Pl. E, 7; p. 53), whence they are reached by a good carriage-road. The tombs approach close to the city and extend as far as to the slopes of the Mokaṭam. They are in much poorer preservation than the Tombs of the Khalifs, partly owing to their having been used as quarries, and partly owing to their conversion into modern burial-places. Some are now represented only by their minarets. A few of these tombs are of architectural and artistic interest; but historical data as to the names of their builders is entirely wanting, for the extant inscriptions upon them are almost exclusively verses of the Korân. They are believed to have been built under the last Mameluke sultans.

One of the most interesting architecturally is the ruin popularly misnamed the Tomb of the Mother of Sultan Hasan. This had originally a double dome. Inside the building are walls arranged in the form of a fan for the support of the outer dome, which has fallen in. - Farther to the S.E., somewhat isolated, we observe the ruined dome and lantern mentioned at p. cxci. - Still farther off the imposing dome of the tomb of Imâm Shâféi, of a bluish-grey colour, is conspicuous. Beside it an extensive modern necropolis, chiefly of family-tombs, has recently been formed.

Near it also is the Hôsh el-Påsha (vulgo Bâsha), or burialmosque of the family of the Khedive, built by Mohammed 'Ali. To the left of the entrance is a sebill. On each side of the large arcade leading to the mosque are apartments for the accommodation of the women who come to pray at the tombs. At the end of this covered passage, on the left, is a small open space, in which, opposite to us, is a small door leading to the entrance of the mosque. (Nearer us is another door on the left, leading to the mausoleum of a wife of ex-Khedive Isma'îl.) As usual in all the mosques, the visitor on entering must put on slippers or linen socks over his boots. (Bakshîsh for one person 2, and to the guide 3 piastres.) The monuments are in white marble, and were executed by Greek and Armenian sculptors. The inscriptions and ornamentation are richly gilded and painted. The Korân is regularly read here.

Returning to the sebîl already mentioned, we may next visit the neighbouring so-called Hôsh el-Memâlı̂k, erected in the 17th cent., probably the tomb of the Mameluke chief 'Ali Bey and his family, but erroneously pointed out as that of the famous Mameluke general Murâd Bey (Hốsh Murâd Bey), who is interred in the Ṣuhag


Tombs of the Mamelukes. (Names unlenown.)

 Sultan Batkưそ



Tombs of the Khalifs.
(Fast Side)
mosque at Girgeh in Upper Egypt. The principal monuments stand on a hollow pedestal, and the domes rest on marble columns.

1. Mother of cabbâs Pasha.
2. ©Abbâs Pasha (p. cxxix).
3. El-Hâmi, son of 'Abbâs.
4. Ahmed Pasha Yeken.
5. Mohammed 'Ali Defterdâr.
6. Ibrâhîm Pasha.
7. Tusûn Pasha, father of 'Abbâs, and his family.
8. Tomb of Ṭusûn Imai Bey, who was burned in the Sûdân.
9. Tusûn 'Ali Sefer.
Besides these
the mosque contains many other

tombs of no importance, chiefly those of the harem.
To the W. of the Helwân railway, near the station, are the baths of 'Ain el-Sira, opened in 1894 under the management of the Wakf.

## 2. The Island of Rôḍa and Old Cairo.

Carriages, see p. 30. - Tickets of admission to the mosque of Amru, see p. 33. - With a visit to Old Cairo may be combined that to the Tombs of the Mamelukes, returning viâ the Bấb el-Karâfeh (p. 53 ) and the Place Méhémet-Ali (fine view from below of the mosque of Mohammed 'Ali).

The Helwan Railway (p. 188), on which are the stations of St. Georges and Madabegh at Old Cairo, is not recommended for a first visit to Old Cairo.

Traversing the New Town of Ismâ̂̂lîya (p. 46) towards the S.W., we reach the Kasr el-̇Ain (Pl. A, 6), with the Mosque Kasr el- Ain (p. 47), near which the howling dervishes perform their zikr (p. xcy). Farther on, we observe on the right and left large magazines for straw ( $t i b n$ ), fodder, and reeds.

The street crosses the Fum el-Khalîg, or influx of the city canal into an arm of the Nile, which, however, is dry from May until the period of the overflow. The festivities connected with the cutting of the Nile embankment (p. 83) take place here in August. Towards the left are situated the Christian Cemeteries, surrounded by lofty walls and presenting no attractions. The first is the English and Protestant Cemetery, the second the Roman Catholic, beyond which are those of the Greeks, Armenians, and Copts. (The railway-station of Fum el-Khalîg, mentioned at p. 188, lies to the E.)

The Head of the Old Aqurduct (Arab. El- Ajûn), which supplied the citadel with water before the completion of the new water-

Baedeker's Egypt I. 3rd Ed.
works (p. 72), rises about 100 yds . beyond the canal. It is constructed of solid masonry in a hexagonal form, and consists of three stories, about 150 ft . in diameter.

The groundfloor contains stables and magazines, and on the first and second are barracks. On the terrace, where there are six water-wheels (sâkiyehs), each worked by two oxen, is a large hexagonal basin from which the water flowed into the aquednct. The aqueduct, constrncted of massive blocks of stone, and resting on pointed arches, ascends in four different levels to the citadel, the total height being 278 ft ., and the total length 4000 yds. ( $21 / 4 \mathrm{M}$.). When the Nile was at its lowest, the water had to be raised to a height of 80 ft . to the first basin. A branch of this conduit supplied the Jewish quarter with water in the neighbourhood of Imâm Shâferi (p. 80). The aqueduct dates from the time of Saladin (12th cent.; p. 54) but was several times restored. The entrance is in the N. wall, at the back of the head of the aqnednct, where a Berber is posted as a cnstodian (fee 2 pias. for each person). Easy ascent by an inclined plane. The "Views from the openings of the platform are very fine.

Leaving the head of the aqueduct, we follow the direction of the arm of the Nile, which, however, is not always visible, as the houses and walls of the Manjal quarter interpose between the road and the water, and reach ( 1 M .) the mansion which formerly belonged to Sulêmân Pasha el-Fransâwi (Colonel Selves), with two fine Arabian portals (visitors not admitted).

The second narrow and short road to the right beyond the château leads to the ferry crossing to the Island of Rôda (Gezîret Rôda). We descend the slope, enter the ferry-boat ( 2 pias. for one person, there and back; for a party more in proportion; payment made on returning), ascend the opposite path, and turn to the right. A gardener is usually in waiting at the landing-place to conduct travellers through the intricate lanes to the garden. At the S. extremity of the island is the Nilometer (Mikyâs), situated on land belonging to the heirs of Hasan Pasha. The garden, laid out in the Arabian style, is miserably neglected. The paths are paved with a kind of mosaic of round pebbles, and the most important of them are bordered with low walls, supporting wooden verandahs and arbours, over which climb immense vines. The gardens contain orange and lemon trees, dates, palms, and bananas, and also the henna plant (p.lxxiv), which is not met with in the public gardens of Cairo.

At the S. end of the garden and island is the Nilombter (Mikyâs), constructed in the year 97 of the Begira (A.D. 716) by order of the Omayyad Khalîf Sulêmân (715-17). It consists of a square well, 16 ft . in diameter, connected by a channel with the Nile, having in the centre an octagonal column, on which are inscribed the ancient Arabian measures. The $d r \hat{a} \hat{c}$, or old Arabian ell, is 54 centimètres, or about $211 / 3$ inches long, and is divided into 24 kirat. The Cufic inscriptions on the central column and on marble slabs built into the walls refer to restorations of the Nilometer in the 9 th cent. after Christ, under the 'Abbaside khalîfs Màmûn and Mutawakkil. Numerous later restorations have also taken place, the lastin 1893.
The office of measuring the water is entrusted to a Shêkh.


#### Abstract

The zero point of the Nilometer (according to Mahmudd-Bey) is 28 ft . above the average level of the Mediterranean, so that the top of the column is nearly 59 ft . above sea-level. The water of the Nile, when at its lowest, covers 7 ells of the Nilometer, and when it reaches a height of 15 ells and 16 kirat , the shêkh of the Nile measurement proclaims the Wefa (p. ciii), i.e. the height of the water necessary for irrigating every part of the Nile valley. The announcement of the wefa is the signal for catting the embankment. The rate of taxation was determined in ancient times in accordance with the height of the inundation, and even to this day there is a certain connection between these two facts. In order, therefore, to induce a belief in a favourable inundation, the Shêkh used to have a private meter, the zero of which is nearly 7 inches lower than that of the old Nilometer, while the ells are shorter.


Adjoining the Nilometer is a large Kiosque in the Turkish style, which may be inspected when not occupied by women. The architecture is uninteresting, but the $S$. verandah affords an uninterrupted view of the Nile, with Gizeh to the right, the pyramids in the background, and Old Cairo on the left (fee 4 pias.).

Near the N . end of the island stands the wonder-working tree of the saint Mandûra, a huge neble-tree, the branches of which are hung with innumerable rags. According to a popular superstition the patient must thus offer to the saint the cloth which enveloped the affected limb, then encircle the tree seven times, pluck off two leaves, and tie them on the affected part with another cloth.

Leaving the island and returning to the right bank, we regain the Old Cairo road, and after $1 / 4 \mathrm{M}$. more we reach the end of the bazaar of this small town (Masr el-Atikka; comp. p. 35). We then turn to the left, and in a few minutes reach a street running from N. to S. Turning to the N. (left), we observe on the right a distinct quarter of the town, built on the ruins of Fostât (p. 35), within the precincts of an ancient Roman Castle, and almost exclusively inhabited by Copts. The plan of the fortress is still traceable by means of the numerous characteristic remains of the Roman outer wall, which encloses the site of the ancient fortress of Babylon (p. 34). On the S. side, between two projecting towers, is a gateway with a gabled roof, now almost entirely ruined. The castle is said once to have been occupied by one of the three Roman legions stationed in Egypt (p. 35), and to have been connected by a bridge with Rôdaa and with Gîzeh, where another Roman station is said to have been situated. Proceeding in a straight direction for about 100 yds., and then about 45 paces to the right of a low doorway situated in a hollow on the W. side and concealed by a small wall, we reach the middle of the Coptic quarter, where, enclosed by a dense mass of houses, is situated the much frequented Coptic church of -
*Abu Sergeh, or Mari Girgis (St. George). According to a widespread belief this church was built before the Mohammedan conquest, and a legendary document preserved by the Coptic priests places the date of its erection in the year 329 of the Hegira, i.e. 940 A.D. A glance at the poor materials of the building, however,
with its wooden ceiling and heterogeneous columns, will at once show the absurdity of this idea. The crypt, however, is undoubtedly much older than the church and may very well date from a pre-Mohammedan epoch. According to tradition, the Virgin and Child after their flight to Egypt spent a month in the crypt of this church.

This church may be regarded as the original model of the older Egyptian-Byzantine churches in which the Coptic Christians now worship t. The basilica consists of a nave and aisles, the latter provided with galleries. The nave and tribuna have open roofs, that of the latter being supported by elliptical beams, and both being probably of later date than the church itself. The lofty side-walls of

a. Entrance from the street.
b. Anterior Court.
c. Entrance to the Church.
d. Vestibule.
e. Women's section.
f. Men's section.
g. Basin.
h. Seat for the chief priest.
k. Wooden screen adorned with carving.

1. Steps to the crypt.
m. Altar.
n. Image of Christ.
o. Reading-desks.
p. Side-chapels.
q. Well.
r. Basin.
s. Sacristy.
t. Magazine.
the nave consist of two rows of columns, one above the other, the columns of the lower row being separated by keel-shaped arches, while the upper series, supporting the gallery, consists of alternate groups of two marble columns and one pillar of masonry, connected by an architrave. The columns of marble originally belonged to ancient edifices, and, like those in the earlier mosques, have been placed here without the least regard to their suitability in point of diameter, form of capital, or other architcctural features. Two of the three original

[^26]entrances are now built up, while the third ( Pl . a), in accordance with the custom of the country, has walls projecting into it in order to prevent passers-by from seeing into the fore-court.

The nave is divided by wooden screens into three sections. The first forms a narthex (Pl. d), or vestibule, the second is set apart
on the walls (the veneration of saints and of the Virgin being a prominent feature of the Coptic system), and then kneel before the altar and kiss the hand of the priest. They then take their stand (for there are no seats) in the part of the church allotted to them, leaning on crntches which they bring for the purpose, as the service often lasts for three hours. The service begins with the reading or chanting of prayers and passages from the Gospels, partly in the Coptic language, and partly in Arabic, in which the priest is assisted by a schoolmaster and a choir of boys. During this performance the worshippers, with very few exceptions, engage freely in conversation, and the noise is said to be sometimes so great that the priest has to come out of the hêkel, or sanctnary, and enjoin silence. After a time the burning of incense begins. The priest, swinging his censer, leaves the hêkel and joins the congregation, each member of which he blesses, placing his hand on their heads. He concludes this ceremony in the women's section of the chnrch, and the ordinary service now terminates.

The Celebration of the Eucharist is very frequent in the Coptic churches, immediately following the ordinary service. The celebrant priest wears a white and gaily embroidered gown reaching to his feet, and bearing the Coptic cross on the breast and sleeves. After washing his hands, he directs a boy to bring him several small ronnd loaves with the Coptic cross impressed on them. He chooses the best of them, places it on a plate, and prononnces over it the blessing of the triune God. He then carries it into the hêkel, places it on the altar, covers it with white cloths, and makes the circuit of the altar several times, reciting prayers, and accompanied by the choristers carrying lighted candles. He next brings the plate with the bread out of the hêkel and holds it np before the people, whereupon the whole congregation kneels. Retnrning to the hêkel, he breaks the bread into small pieces, puts it into a chalice, ponrs wine over it, and eats it with a spoon, distributing a few pieces to the assistant clergy and the choristers. Lest any fragment of the consecrated elements should be profaned, he finally washes all the ntensils and his own hands, and drinks the water in which he has washed them. Meanwhile a number of small round loaves, prepared in an adjoining apartment, are distributed among the congregation, each member receiving and eating one or more. The laity partake more rarely of the wine, and only after having previously confessed. In this case the communicants approach the door of the hêkel, where the priest administers to them with a spoon a piece of the bread dipped in wine.

A curious ceremony takes place in the Coptic chnrches on Palm Sunday ( $\mathfrak{i} d$ esh-sharânin). After the usual service and the communion which follows it, several basins of water are placed in the space before the hêkel. The priest in his white surplice takes his stand in front of them, tnrning his face towards the hêkel, while another priest in his ordinary dress reads the Gospel in Arabic, after which the former consecrates the water by pronouncing a prayer over it. The moment this ceremony is concluded, the surronnding congregation rushes up to the basins in order to dip palm-wreaths into them; and the crowd is often so unruly that the priest is obliged to restore order with the aid of his stick. These wreaths are then worn by the Copts under their tarbûshes dnring the whole of the following year as amulets against the evil eye, the sting of scorpions, and every other misfortune that can befall body or soul.

On 18th January, the anniversary of the Baptism of Christ (rid elghitas), men and boys plunge into the large font or bath which is to
for the women (Pl. e), and the third for the men (Pl. f). Within the vestibule (first section of the nave), as in most of the ancient Christian churches, is a trough ( $\mathrm{Pl} . \mathrm{g}$ ) in the pavement for washing the feet and other ablutions. Beyond the three sections of the nave, and raised by a few steps, is the choir where the priests officiate, and which is adjoined by the central gallery containing the sanctuary and by two side-chapels, that on the left surmounted by an Arabian dome. The Hêkel, or sanctuary, containing the altar(Pl.m), is enclosed by a wall, doors, and curtains. Inside the apse rise several steps of masonry, in amphitheatrical fashion, towards the place which in European churches is occupied by the episcopal throne, and in the present case by an image of Christ. The wall (Pl. k), the Ilsonostasis of Greek churches, separating the sanctuary from the choir, is panelled and richly adorned with carvings in wood and ivory. The oldest of these, probably coæval with the church, represent the Nativity, the Eucharist, and the patron saint of the church, and are surrounded with ornamentation in wood, consisting of rectilineal patterns, the basis of which is generally the Coptic cross ( $\Psi$ ). Another favourite device, which is often seen at Jerusalem, and with which the Copts frequently tattoo their arms, consists of the same cross, with four smaller crosses in the angles. Above a door to the right of the high-altar, engraved in wood, is the Coptic inscription, 'Greetings to the Temple of the Father!' Below it is a modern Arabic inscription with the date 1195. The church also contains some interesting Byzantine carving and mosaics in ivory, now blackened and discoloured with age. A number of old pictures of saints, some of them on a gold ground and with well-preserved colours, possess no artistic value. The Coptic priest who exhibits the church expects a fee of 1 pias. from each visitor. A narrow flight of twelve steps (Pl.1) descends to the Crypt, a small vaulted chapel under the choir, consisting of nave and aisles (boy to show the way 1 pias.). At the end of the nave is an altar in the form of an early Christian tomb-niche, which tradition indicates as the spot where the Virgin and Child reposed; in the centre of the aisles are apses. The right aisle contains the font, into which,

[^27]according to the Coptic ritual, the child to be baptised is dipped three times.

The Coptic quarter of Old Cairo contains several other basilicas, used by Coptic, Greek, and Jewish congregations, but interesting only to those who are making a special study of this kind of architecture. Among them we may mention the Seiyideh Maryam, or Greek Church of the Virgin, on an elevated site, and sometimes called El-Mo'allaka, or 'the hanging', containing ivory carving and stained-glass windows. The church of $M \overrightarrow{d r i}$ Mena contains a handsome candelabrum. That of Aba Sefên has a pulpit in coloured marble, inlaid with mother-of-pearl, and a jug and basin with old Arabian enamel work. The Synagogue (Esh-Shamydn, or Keniset Eliyahu) was formerly a church of St. Michael. The Jews say that Elijah once appeared here. The church of St. Barbara is embellished with many carvings in wood and ivory, and with paintings of more than average merit.

Starting from the door of the castle, we pursue our way towards the $N$., across rubbish heaps, skirt the town-wall of Old Cairo, and after 650 yds . reach the W . façade of the ancient, externally insignificant mosque of Amru, which has three entrances. Visitors usually enter by the S. entrance (Pl. E), below the minaret.

The Gámi'a ‘Amr ibn el-‘As, called Mosque of Amru by the Europeans, owes its name to the general of the Khalîf 'Omar, though not a trace now remains of the original mosque built of sun-dried bricks, which was only 50 ells long and 30 ells broad. Indeed there is scarcely a building in Egypt that has so frequently been destroyed by water, fire, and earthquake, and that has been so regularly rebuilt and enriched with gifts. Many portions of the present edifice seem to date from a reconstruction undertaken about 1400 A.D. by the rich Cairene merchant Ibrâhîm el-Mohalli. Another extensive restoration took place in the 18th cent.; while much of the ceiling is quite modern. Corbett-Bey has published an interesting monograph in English on this mosque (Cairo; 1890).

The interior ( 2 pias. to the attendant who escorts the visitor) is in exact accordance with the typical form of the rectangular mosque with a hypæthral arrangement of columns round an open court; and in spite of its imperfect state (the N. and S. colonnades are wanting), its great size produces an imposing effect. The columns, all of marble of various kinds, were once 366 in number. Their heterogeneous nature is accounted for by the fact that they were brought from Roman and Byzantine buildings in Cairo and were adapted to their new functions by rude Procrustean methods of lengthening or shortening. The difference in their sizes, however, is partly veiled by the circumstance that many of the pointed arches of the arcades closely approximate to the round or horse-shoe shape. The boundary walls, which are built of burned briek, exhibit pointed arches resembling those mentioned at p. 78 , formed of two almost straight girders; the best examples of this variety are in the W. portion of the $S$. wall. Byzantine artistic forms also may be observed in the walls and in the wood-carvings built into them.

The Court (Fasha) has recently been planted with trees. In the centre is a fountain, beside a palm-tree. The Eastern L̂̂wân is
the sanctuary. In front of the Mimbar (Pl. 4) is a Column of grey marble (Pl. 5), on which, by a freak of nature, the names of Allah, Mohammed, and Sultan Suleimân in Arabic characters and the outline of the prophet's 'kurbatsh' appear in veins of a lighter colour.

E. Chief Entrance. (E1, $\mathrm{E}^{2}$, former entrances.) - M. Minaret. - 1. Hanafiyeh. - 2. Dikkeh. 3. Kibla. 4. Mimhar. 5. Column with Mohammed's name. 6. Tomb of Shêkh Abdallah. - 7. Pair of columns in the W. Lîwân. - 8. Side-court with Mêda and latrines.

This column is believed by the Muslims to have been transported miraculously from Mecca to Cairot. In the N.E. corner is the Tomb of Shêkh 'Abdallah, son of 'Amr (Pl. 6). The Western Lîwân

[^28]was formerly divided by a row of coupled columns, of which one Pair of Columns (Pl.7) alone remains. They are placed very close together, and it is said that none but honest men could squeeze themselves between them ; but the Khedive abolished this test of character by walling up the interstice.

In 1808 this mosque, which has long been almost disused, witnessed a very remarkable scene. At the usurl period of the rise of the Nile, the water began to fall. Dismayed by this strange phenomenon, the whole of the Mohammedan priesthood, the Christian clergy of every sect, and the Jewish rabbis, with one accord, assembled in the mosque of 'Amr to pray for the rise of the water, and so effectual were their prayers that the river ere long rose to its wonted fertilisiog height.

The traveller will find it not uninteresting to visit one of the Kulleh Manufactories on the S. side of the mosque, and to inspect its primitive apparatus (bakshîsh, a few copper coins). The porous water-jars (Arabic Kulleh) used throughout the whole of Egypt are chiefly manufactured at Keneh in Upper Egypt of light grey clay of very equal consistency. The remarkably uniform and delicate porosity of the vessels is produced by mixing the clay with ashes, which, the first time the vessel is used, are partly washed away by the water. The rapid evaporation caused by the porosity of the kulleh cools the liquid within to a temperature of $12-14^{\circ}$ lower than that of the surrounding air.

A visit to the Tombs of the Mamelukes (p. 80) may be conveniently made from this point. Continuing to follow the road across the rubbish-hills of Fostât, we observe on our right a Muslim burial-ground, and at a short distance in front of us the old aqueduct (p. 81). A little to the right, on an eminence, rises an old ruined mosque ( $G \hat{a}$ mi'a $A b \hat{u} S u^{\prime} \hat{u} d$ ), beyond it is the Citadel with the mosque of Mohammed 'Ali, and farther distant are the hills of the Mokattam with the mosque of Giyûshi (p. 130). This view is very striking towards sunset. The road, which becomes bad beyond this point, leads round the ruined mosque and ascends heaps of debris. On the top of the hill it divides. The branch to the left leads back to the town, from the houses of which the Mosque of Sultân Hasan (p. 52) stands out conspicuously. The road, first in a straight direction, afterwards inclining to the right, leads to the necropolis known as Imàm Shâféi (p. 80).

## 3. Bulák and the Island of Bâlâk.

0 wing to the expansion of Cairo towards the W., in the direction of the Nile, Balak (or Boulaq), situated beyond the Isma'îlîyeh Canal, and formerly an island, has become the river-harbour of the city of the Khalîfs. Its narrow streets present a very busy scene, affording a more characteristic picture of Oriental life than the capital, as the inhabitants of distant provinces are proportionally more numerous here. Goods are conveyed hither from Upper Egypt, from Nubia, from the interior of Africa (so far as the Mahdîya per-
mits), and from the fertile Delta. The principal quay is nearly opposite the palace of Gezirreh; and it is most frequented between October and December, when the rapids of the river are most easily navigated. The merchants of Cairo congregate here every morning to make purchases, frequently as early as 7 o'clock. When there is a scarcity of goods, they sometimes go out to the vessels in boats; but when there is no scarcity, the goods are sold by auction in Bûlâk. Caravans bringing merchandise also arrive here not unfrequently, the most important being from Tunis viâ Kufra and Sîwa, while those from Wadai and Dâr-Fûr have been almost entirely stopped by the altered political situation.

At Bûlâk, and at the moorings of Embâbeh (p. 92), farther to the N., the traveller will find the dahabîyehs, or boats fitted up for the voyage to Upper Egypt. At the N. end of the town is situated the Arsenal, founded in 1835, with a manufactory of weapons attached to it. Machinery for Egyptian manufactories arriving from Europe is put together at Bûlâk before being sent to its final destination, and all repairs of machinery are also executed here. Bûlâk also boasts of a large Iron Foundry, an Ecole des Arts et Métiers, a Paper Manufactory, a House of Correction for Women, a Lunatic Asylum, and the Government Printing Office, none of which establishments will interest ordinary travellers.

The Arsenal and Stores of Messrs. Cook $\&$ Son are shown to visitors armed with a permission from the company's offices at Cairo (p.29).

The Viceregal Printing Office (el-matbaca) was founded by Mohammed 'Ali, chiefly for the purpose of printing and disseminating translations of European (especially French) works of all kinds. The introduction of printing had at first to contend against serious prejudices, as many of the Muslims feared that the name of God would be defiled by contact with impure substances used in the process. To this day, indeed, the Korân is preferred in a written form; but, thanks to the perseverance of the government, the prejudice against other printed books has now almost entirely disappeared, and there are few of the many modern institutions recently introduced into Egypt which have thriven so well as this printing-office. The number of private printing-offices is also increasing from year to year. Of the works printed in Egypt 1000-4000 copies are usually struck off, and the fact that the whole of them are generally sold within a few years affords a proof that the taste for literature in the East is again on the increase. Some works, such as Bokhâri's collection of traditions, have an immense sale. Energetic attempts are still being made to render European works accessible to Orientals in the form of translations, chiefly from the French. Thus, among the legal works, may be mentioned a translation of the Code Napoléon, among the geographical the works of Malte Brun, and among the historical the Life of Charles XII. by Voltaire. - At the same time the national literature has not been neglected, and a number of valuable early Arabian works have recently been brought into notice by the agency of the printing-press, such as the historical works of Ibn el-Athîr (comp. p. ccxv), those of Makrizi (p. ccxv), those of El-Makkari, the writer of Spanish history (17th cent.), and the 'Book of the Songs' by Abulfarag el-Isbahani (d. 966).

A peculiarity of many of the books recently printed at Bûlâk is that smaller works illustrative of the main text are printed on the margins of the pages. The paper used for the purpose is made in Egyptian manufactories, chiefly from maize-straw, which accounts for its yellowish tint.

The great collection of Egyptian antiquities formerly preserved at Bûlâk was removed in 1889 to the old Khedivial palace at Gîzeh (p. 94).

On an island in the Nile, opposite Bûlâk, rises the former palace of Gezirreh. The road thither crosses the handsome Great Nile Bridge adjoining the Kasr en-Nîl (Pl. A, 5; p. 46), the extensive barracks of Cairo. The bridge, about 420 yds. in length, was built by a French iron company. The buttresses, which were constructed with the aid of air-tight 'caissons', are of solid stone, and are 55 yds. apart. The bottom of the foundations is about 45 ft . below the level of the river when at its lowest. At a very early hour in the morning an interesting and picturesque crowd of peasantry may be seen congregated here for the purpose of paying duty on the wares they are bringing to market. It should be borne in mind that the Nile bridge is closed at about $9 \mathrm{a} . \mathrm{m}$. and from 1 to $2.30 \mathrm{p} . \mathrm{m}$., the times appointed for the passage of vessels through it.

The S. part of the Island of Btlake (Gezirct Bûlâk), to the right of the road to Gîzeh (p. 94), is adorned with a beautiful avenue of lebbek-trees, which is thronged with the equipages of fashionable Cairenes on Frid. afternoons from about 5 p.m. In the level central space are a Race Course (to the E.) and the Recreation Grounds of numerous clubs (to the W.).

A Footpath leads directly from the end of the bridge among palm-trees by the side of the Nile, affording views of the traffic on the river and on the Bûlak bank. Refreshments (milk, etc.) may be obtained at the Cafe Bellevue, etc.

The former Viceregal Château of Gezîrbi ('Island Chàteau'), to the N.E. of the avenue, on the Nile, was purchased in 1893, along with the adjacent buildings and the park, by a limited hotelcompany and has been opened as the Gezîreh Palace Hotel (see p.28). The château was erected, after many interruptions and alterations, by Franz Pasha (p.73), a German architect, in 1863-68, and fitted up with fabulous splendour. The masonry was executed by native workmen. The principal rooms of the chateau and of the *Casino or Kiosque in the park (reconstructed by Franz) were tastefully ornamented with Moorish stucco-work by C. von Diebitsch; other rooms by Ercolani and Furey. The coloured marble pavements were executed by Bonani of Carrara; and the cast-iron work, notably the gallery of the Kiosque in the Alhambra style, is from the Lauchhammer foundry near Dresden. In the reign of Isma'il Pasha the château was frequently inhabited by high foreign personages, and the distinguished guests present at the opening of the Suez Canal in 1869 were entertained here. Among the relics of the former magnificence are six costly onyx mantelpieces in the château, and a few artistic bronzes, by Barbedienne of Paris, in the Casino. Many other costly articles were removed years ago to other Egyptian palaces or to Constantinople. - The *Park, which was formerly quite
neglected, with empty ponds and dilapidated fountains, etc., has now been set in order by the hotel-company (baud-concerts daily). A fountain by Bonani, representing the Infant Nile, deserves mention, To the N. of it is the former Harem Building, part of which was erected by Mohammed 'Ali. Between the château and the kiosque is a grotto with water-works and a summer-room.

The N. part of the island is now occupied by a division of the Camel Corps of Suakin and Gezîreh. A visit to the camp and drillground is interesting.

The W. Arm of the Nile is dry when the river is low, but is used as au escape-conduit when the narrow main-brauch is full, and would otherwise threaten Bûlâk with inundation.

Below Bûlâk and the island the Nile is spanned by the Railway Bridge mentioned at pp. 26, 159, which can also be used by footpassengers and carriages. The station on the left bank is known as Embâbeh. This was the scene of the 'Battle of the Pyramids', in which the French under Bonaparte defeated the Mamelukes (July 21st, 1798). The occupation of Cairo followed the victory (p. 37).

## 4. Shubra and the 'Abbâsiyeh.

The visit to Shubra, apart from the pleasant drive in the avenue, is not specially interesting, while the inspection of the viceregal gardens involves previous written application to His Excellency Mohammed Bey, at the Kaṣr 'Ali (p. 47). - The 'Abbasîyeh is also of little interest.

The broad Shubra Avenue, shaded by beautiful sycamore and leb-bek-trees, begins beyond the Lêmûn Bridge and the Railway Stations (Pl. B, A, 1; p. 27), and leads straight N. to the ( $2 \frac{1}{2}$ M.) village and palace of Shubra, on the Nile. A few years ago this avenue was the Rotten Row, or Avenue de Boulogne, of Cairo, especially on Friday and Sunday evenings; but it is now merely an unusually busy country-road, with a picturesque mixture of townsfolk and country people. Beyond the railway-station, where the avenue begins, are a number of cafés and refreshment-stalls. Near the beginning of the drive are several villas, one of which, to the right, a little back from the road, is the beautiful Villa Ciccolani. The tower commands a good survey of the environs (fee 5 pias., in spite of the keeper's demand for 5 fr .). On the left is the former viceregal palace Kasr en-Nuzha, now occupied by the Ecole Normale and the Lycée Tewfik (director, Peltier-Bey).

At the end of the avenue, and beyond the first houses of Shubra, we cross a canal by a drawbridge, turn to the left towards the Nile, and follow the embankment to an archway. Passing through this, we enter a tree-planted space, and reach the entrance of the-

Viceregal Gardens of Shubra, laid out by Mohammed'Ali and his son Falîm Pasha, but now utterly neglected - an example of quickly fading Oriental magnificence. After presenting our ticket of admission, we first proceed to the kiosque (fee 5 pias.), after
which a gardener shows the grounds, which cover an area of nearly nine acres (fee 5 pias.). The kiosque presents no interest except as an example of rich and effective garden architecture. The garden was somewhat incongruously re-modelled by M. Barillet (p.lxxv) in the old French style, which is ill-adapted for the Oriental vegetation, but it also contains some beautiful rose and geranium beds. Among the tropical plants we remark the beautiful Indian lemon-shrub and a huge lebbek-tree (p. lxxv). An artificial hill in the garden commands a good survey of the grounds. The large building to the N . is a house of correction.

Another point in the immediate vicinity of Cairo that deserves mention is the 'Abbasiyeh, which lies on the edge of the desert, about $1 \frac{1}{2}$ M. to the N.E. of the Bàb Huseinîyeh (Pl. E, 1 ; p. 75). Abbâsîyeh is a group of houses and cottages, founded by cabbâs Pasha in 1849, in order to afford suitable accommodation for the Beduin shêkhs whose friendship he was desirous of cultivating, and who objected to enter the city itself. A large palace which formerly stood here has been replaced by barracks in the most modern style, besides which there are numerous older barracks and a Military School with a gymnastic-ground. The British troops are at present encamped here. The European Hospital (p. 31) is also situated here; and near the last barrack on the left rise the Meteorological and Astronomical Observatories. - The railway-station of Demirdâsh (p. 127) lies to the W. of 'Abbâsîyeh; a branch-line thence passes through the village.

The main road at 'Abbâsîyeh crosses the embankment of the old railway to Suêz, and, near the station and village of Kubbeh (p.127), also the railway to Merg. About $11 / 2 \mathrm{M}$. from © Abbâsîyeh, not quite halfway to Matarîyeh, it passes the garden (no admission) of the winter-residence of the present Khedive (marked Palais Taufild. on our Maps). - Thence to Matariyeh, see p. 127.

The Gebel el-Ahmar, or Red Mountain, rises to the E. of 'Abbâsîyeh. At its base, reached by a carriage-road diverging to the right a short distance outside the Bâb Huseiniyeh (p. 75), is an old Viceregal Chateau. The mountain consists of a very hard miocene conglomerate of sand, pebbles, and fragments of fossil wood, cemented together by means of silicic acid, and coloured red or yellowish brown with oxide of iron. According to Fraas, the two colossal statnes at Thebes are composed of rock from the 'Red Mountain'. For many centuries the quarries here have yielded excellent and durable mill-stones, and the neighbouring huge heaps of debris afford abnndant material for the construction of the macadamised roads of Cairo and Alexandria. The substratum of limestone, beneath the conglomerate, which is connected with the Gebel Giyushi (p. 129), is also quarried. The entire mountain is skirted by a railway for the service of the quarries.

## 6. The Museum of Gizeh.

> The Museum is about 3 M . from the Ezbekîgeh (comp. the Map, p. 126). Carriages and Donkeys, see p. 30 . Visitors should bear in mind that the Great Nile Bridge is closed for traffic at about 9 a m. and from 1 to 2.30 p.m.

On the left bank of the Nile, opposite the island of Rôda, stands the Palace of Gîzeh, just below the now decayed village of Gîzeh, which is named in the middle ages as a summer-residence of the Mameluke sultans. This palace now contains the great viceregal collection of Egyptian antiquities. - We cross the Nile by the Great Iron Bridge near Kaṣr en-Nîl (p.91), traverse the S. end of the Island of Bûlôlc (p. 91 ; to the left the caravan-depot), and then cross a smaller bridge over the periodically dry arm of the Nile. Beyond this bridge the road to Gîzeh, which is shaded by beautiful lebbek trees, diverges to the left and skirts the bank of the Nile, which is peopled by a motley throng. (The road straight on leads to the railway-station of Bûlâk ed-Dakrûr, p. 159.) On the right are a number of palaces and property belonging to the Khedive, and the Estate of Prince Husên Pasha, with an interesting garden in the European style (for admission apply at Stamm's flower-shop, at the corner of the Shâría Kamel and the Route de Bûlâk, in Cairo). Farther on, on the same side, is the entrance to the extensive park and palace of Gîzeh.

The Palace of Gizeh, a huge rambling edifice, built in a light and unsubstantial Oriental style, with about 500 saloons and apartments, was erected by the ex-Khedive Isma'îl for his harem at a cost stated at 120 million francs. Since 1889 the Museum of Egyptian Antiquities, formerly at Bûlâk, has been installed here, though danger of fire, if nothing else, renders it a very unsuitable depository for so valuable a collection. The building of a museum in Cairo itself is projected for the next few years. - A walk in the *Park is refreshing after a visit to the Museum.

The **Museum of Egyptian Antiquities is the most valuable collection of the kind. Its value is much enhanced by the fact that the place where the various objects were discovered is in nearly every case precisely known, a circumstance of the greatest importance for the geographical and historical explanation of the monuments. The collection was founded by the eminent French Egyptologist Aug. Mariette (d. 1881), and after his death was conducted by the no less eminent $G$. Maspero (1881-1886), and by E. Grébaut. The present director is Jacques de Morgan; the conservators are G.Daressy and E. Brugsch-Bey. - The earliest description of the Museum is Mariette's 'Les Principaux Monuments du Musée de Boulacq' (1864); Maspero also published a 'Guide du Visiteur au Musée de Boulacq' (1884). The present detailed Catalogue (1894), by J. de Morgan, which is sold at the entrance, is quite indispensable for students.

In the following description we mention the place of discovery only of the more important or more recently acquired objects, referring the visitor for farther details to the catalogue. Alterations in the arrangement of some of the rooms may be caused by the addition from time to time of new objects discovered in the course of the excavations actively carried on by the Museum authorities.

The museum is open in winter daily, except Mon., from 9.30 till 4.30 ; admission 5 piastres, free on Tues.; the crowd of Arab visitors of the lower classes renders the latter day unsuitable for a visit. In summer ( 15 th Mar. to 15 th Oct.) the museum is open from 8.30 to 12. Sticks and umbrellas are given up at the entrance and returned at the exit (no fee).

A special room is reserved for Students; apply to the director or to one of the conservators. - In the Sale Room (R. Ixi) duplicates, etc., of the antiquities may be purchased, at prices fixed by the Museum authorities and plainly marked on the objects offered. Purchases here made have, of course, a guarantee of their genuineness (comp. also p. xvii).

In the Garden near the entrance is a tall pedestal supporting a Sphinx in red granite, with the cartouches of the Pharaoh Ramses II., added later. On the right of the road to the palace is the top of an Obelisk from Karnak (17th Dyn.). On a platform of masonry in front of the main entrance rests the marble sarcophagus of Aug. Mariette (p. 94).

## The Ground Floor

contains the more ponderous monuments of the collection.
a. Monuments of the EarlyEmpire(I-XI. Dynasties, 3892-2380 B.C.).

Room I. - The Most Ancient Monuments, some dating from before the pyramid-builders.

To the left of the entrance: 1. Granite statue of a kneeling priest, perhaps from the 2nd Dyn. - *2. Three wooden panels with six reliefs. These panels, taken from the walls of a tomb at Sakkâra, represent the figure of 'Hesi', the deceased, while the hieroglyphics above give his name and his titles. The work is executed by a master-hand and is not unworthy of comparison with the Shêkh el-Beled (p.96). The delicacy and decision of the lines is unsurpassed, as is also the knowledge displayed in the modelling. Mariette refers these reliefs to the 3rd, Maspero to the 5th Dynasty.

To the right of the entrance: 3. Fragment of the inner lining of a tomb, found in a grave at Mêdûm. The six geese represented here are drawn and coloured with great accuracy. The material is a kind of hardened clay coated with plaster.

In the middle of the room : 4, 5. Two sacrificial tables in alabaster. Two lions support each of the tables in a slightly tilted position, so that the libations ran down into a vase placed between the tails of the lions (4th Dyn.). - *6. Double group in limestone, found in 1870 in a maṣtaba near Mêdûm, the colouring still re-
mark ably fresh. It represents Rahotep, 'leader of the infantry' (probably of unpretending origin) and his wife Nefert, 'a princess of the blood', both in the costume of the period, admirably differentiatep in expression (Nefert has all the self-importance of a princess). The eyes, made of coloured quartz, impart a very lifelike air to the figures (end of the 3rd Dyn.). - 7. Alabaster sacrificial table, discovered among the foundations of the temple of Ptah at Memphis, probably dating from the 1st Dyn.; 8, 9. Two steles of Situ (4th Dyn.), representing the façade of an ancient Egyptian house, with a wooden roof.
S. side of the room : 10. Large stele from Sakkâra, resembling the preceding; 11, 12. Door-posts, with relief of the wife of SokarKhabiu (limestone; Sakkâra); 16. Stele in the form of a door, from the tomb of Sokar Khabiu (limestone; 3rd Dyn., Sakkâra).
E. side: 13. Stele from the tomb of Sheri, priest of King Send (2nd Dyn.; limestone); 14. Rectangular sacrificial table, in alabaster, with the name of Snefru-nefer, priest of the Pyramid of Assanefer (5th Dyn.); 15. Similar table, but round (Sakkâra).

Room II. In the centre: 17, *18. Statues of Ra-nefer, a priest, in one case wearing a wig (in limestone). The muscles of the arms and breast are executed with great realism, and the statues rank among the most perfect specimens of Egyptian art (5th Dyn., Sakkàra). - Between these: 77. Statue of Ti, of the same period, found in the serdâb of his tomb at Sakkâra (p. 180). In front: 1311. Seated limestone statue, with admirably preserved colouring. - To the left: **19. Wooden Statue from Sakkâra of Racemka (or perbaps more correctly, Hotepherkhut), an inspector or foreman of workmen, such as might have been employed in building the Great Pyramid. It is known as the Shêkh el-Beled (village-chief), a name given to it by the Arabs on account of its resemblance to a wellfed specimen of that modern functionary.

The fignre, which dates from the early part (4th Dyn.) of the old empire, affords a proof that the Egyptian sculptors were quite capable of executing really artistic work whenever they could shake off the fetters of their rigid canon. The feet, which had been broken off, are restored, but the rest of the figure is in its original condition. The arms are separately worked and attached to the body. The upper part of the body and the legs are bare, while from the hips hangs a kind of apron folded in front. In the hand is the long rod of office. The round head with its short hair, and the portrait-like, good-nature face are remarkably lifelike. The eyes, which have a somewhat rigid expression, were putin, as in the case of other similar statues, after the work was completed. They consist of pieces of opaque white quartz with pupils formed of rockcrystal, in the centre of which is placed a polished metal knob for the double parpose of securing them and giving them light and sparkle; and they are framed with thin plates of bronze, the edges of which form the eyelids. The figure, like No. 108 in Room X, was originally covered with linen, upon which a thin coating of plaster was laid and then painted.

Opposite: 1310. Limestone figure of a seated Scribe, from Sakkâra; the stylus in the right haind was inserted. *1175. Wooden coffin and mummy of King Aahmes I. (18th Dyn.; comp. p. cviii).
N. side of the room: 21. Statue of the priest Atep; 23. Large limestone stele, of fine workmanship, mentioning the names of Ra-en-kau and his wife'Ahat, priestess of Hathor; 24. Limestone stele of Hesesi, keeper of the corn-magazine, the treasury, etc.; to the left, Statue of a Scribe (4th or 5th Dyn.), found at Sakkâra in 1893.
S. side: 22. Statue of Eikau, president of finance; *25. Admirable limestone stele of Urar-en-Ptah (Sakkâra); 20. Limestone statue of a priest named Ans-kha; 26. Large limestone stele of Nub-hotep, priestess of Hathor and Neith; 27. Similar stele of her husband Tes-hon (both found at Sakkâra in 1892).

29,30 . Wall panels from a niche in the tomb (mastaba) of $\$ a b u$ at Sakkâra (5th Dyn.).

One of these represents the deceased sitting at a table covered with slaughtered cattle, eggs, flowers, fruit, and other offerings, which are being brought in by servants; on the other side we see Sabu seated in a kind of litter, while a number of men and women are bringing their gifts to the tomb. Below are represented the cutting up of slanghtered oxen, the deceased navigating the Nile, and his cattle being driven before him to be counted.
31. Large alabaster sacrificial table, of the Early Empire.
N. side again: 32. Sacrifcial vase, in diorite, with the name of Ptah-Khuni; 33. Fragment of a statue of Chephren (4th Dyn.; diorite), from the well of the granite temple at Gizeh.

On the S. side again: *35. Female torso (in wood), found in the grave of the Shêkh el-Beled, and probably representing his wife; 36. Limestone stele of Sesha (6th Dyn.), from Abydos.

Room III. In the centre, Five coffins and mummies of Kings (comp. p. 123): 1177. Coffln and mummy of Amenhotep I. (18th Dyn.); the head wears a mask; 1178. Coffin and mummy of Tutmes II. (18th Dyn.) ; 1179. Coffin of Tutmes III. (18th Dyn.), much damaged and stripped of its gilding; 1180. Coffin and mummy of Seti I.; 1181. Coffin and mummy of Seti's son Ramses 1I. the Great, the Sesostris of the Greeks (19th Dyn.). The inscriptions record two changes in the resting-place of the mummies, once in the 16th year of King Si-Mentu, and once in the 10 th of the high-priest Pinozem. *43. Statue of the judge Ateta (lime-stone; 5th Dyn., Sakkêra); 44. Statue of Khui, in limestone, with two women crouching at his feet.
N. side: 37 . Alabaster statue of a king (name unknown); 39. Statue of King User-en-ra (5th Dyn.; pink granite), both from Sakkâra; 42. Statue of Chephren, in green basalt (Gizzeh).
E. side: 46, 45 . Headless statues of Chephren, in green basalt and diorite, from the temple of the Sphinx at Gîzeh; 38. Alabaster statue of King Menkahor (5th Dyn.); 41. Alabaster statue of Chephren; 40. Statue of Menkaura (Mycerinus), builder of the third pyramid of Gîzeh (4th Dyn.); 47. Stele, inscribed on both sides, with the name of King Pepi Neferkara (6th Dyn.); 60. Limestone stele, representing a sacriffcial table, with the royal consort Papi Ankhnas on one side, and $A-u$ on the other ( 6 th Dyn.).

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S. side: 48. Block of grey granite, on the lower part of which is a small naos, with the name of King Sahura (bth Dyn.); on the top of the block is the sign 'Kher' (i.e. 'this side down'). 49. Stele of limestone, with an inscription of 50 lines, in which the deceased Una records his exploits under the three Pharaohs, Teta, Pepi I., and Mer-en-ra, including his work on the pyramids constructed by the last two kings (both in Sakkâra, opened in 1880-81); 50. Fragment of a hieroglyphic inscription (limestone; 4th Dyn., Gîzeh), agreement between an Egyptian grandee and a priestly body relative to offerings to be made to the former; 51. Door-posts, iu grey basalt, with the name of Tau, brother-in-law of King Pepi Rameri and uncle of King Neferkara (Abydos). 61. Block of syenite, with the cartouche of King Pepi (6th Dyn.), found in 1887 at Bubastis.
W. side: 52. Diorite statue (headless) of a prince, found in the temple of Isis to the E. of the pyramid of the daughter of Cheops, near Gîzeh; 53. Painted limestone stele of Queen Tatit, of the Early Empire (Saḳkâra).
54. Celebrated tombstone of the 25 th Dyn., probably a copy of an original of the 4th Dynasty.

The inscription is a record hy King Cheops of various works and restorations carried out by him. It contains a representation of the great sphinx of Gîzeh, with an intimation 'that the dwelling of the sphinx Harmachis lies to the S . of the temple of Isis and to the N. of the temple of Osiris'.
55. Bla: granite stele of Prince User, found to the N. of Karnak.
N. side Cabinet A: Smaller articles from the tombs of the Early Empire; small bronze and alabaster vases; sacrificial geese, in limestone; small tablets with sacrificial objects; etc. - Cabinet B: Vases and sacrificial tablets; 56. Alabaster lid of a vase, with the name of King Pepi Neferlara (6th Dyn.); 57. Roll of linen with the same name; 58. Fragment of an alabaster vase, with the name of King Rameri; 59. Sacrificial geese, in alabaster.

Room IV. Steles and statues dating from the Early Empire: 62. Sitting statue of Hekenu, a member of the royal family (in limestone); 63. Limestone stele of Nuter-nefer, with portrait of the deceased in full face (not, as usual, in profile).

Room V (large vestibule). In the centre: **64. Statue of King Chephren or Khafra, the builder of the second pyramid, found in the well of the granite temple near the Sphinx (p. 154).

The king is represented in life-size, sitting on a throne, the arms of which terminate in lions' heads. At the sides of the seat are papyrus and lotus plants intertwined around the symbol of union $\mathbb{F}$, which indicates the junction of Opper with Lower Egypt, and is perhaps emblematical of the transition from this life to the next. On the pedestal, to the right and left of the feet of the statue, is inscribed in distinct hieroglyphic characters: 'The prince and victorious Horus, Khafra, the good god and lord of the diadem'. In his right hand the monarch holds a roll of papyrus. On the top of the back of the throne is a hawk, protecting the king's head with its outspread wings. The torso is of a more
thickset type than is the case with the statues of the modern empire, having been modelled in accordance with the rules prescribed by the hieratic canon at that early period, and the whole figure breathes a spirit of strength and repose. The muscles of the breast and legs are reproduced with wonderful accuracy. The statue is made of an extremely hard diorite, worked with great skill.

In the S.E. corner of the room: 65, 66. Large limestone steles of Ankheftka and Ankhmaka, two priests of King Sahura and King Userkaf (5th Dyn.); 67. Limestone sarcophagus of Uta, a priest in the service of King Mycerinus (6th Dyn.), found at Sakkâra in 1892.
N.E. corner: 68. Limestone stele of Safekh-nefer-sim, a high official of the 5th Dyn.; 69. Funeral offerings for Safekh-nefer-sim.
N. W. corner : 70. Large limestone relief of Ptah-hotep (5th Dyn.).
W. side: 71. Limestone stele, with the name of $T a \ddot{\ddot{ }}$, mistress of the harem; 72. Stele of Shemkhetnankh, a chief physician (5th Dyn.).
S.W. side: 73. Stele of Ahines, governor of Turra. All these monuments are from Saḳkàra.

In the middle of the room: *'74. Sarcophagus in red granite of Prince Hirbä̈f, with sculptured representations of the façades of houses (4th Dyn., Memphis).
S. side : 75. Statue in black granite of a crouching scribe named Ra-nefer; 76. Similar statue of the scribe Sedenmat, partly coloured.

Room VI contains steles and statues, all dating from the Early Empire. Cabinets $E$ and $F$, in the middle of the room, contain sepulchral statuettes of the Early Empire (5th and 6th Dyn.); the face of the first figure to the right, in Cabinet F, is remarkably individualized in its irregularity.

Room VII (Room of the Ornaments). On the wooden stands is a collection of statuettes from graves at Gîzeh and Sakkâra (4-6th Dyn.). The cabinets contain small and lifelike figures, differing entirely from the ordinary stiff attitudes of Egyptian statues.
N. side, to the right of the entrance: Cabinet $A$ : Statuettes dating from the Early Empire. 87. Man with a sack on his shoulder and his sandals in his hand (5th Dyn.); 88. Baker and woman kneading dough; 89. Kneeling statuette (limestone) of a man under the influence of fear. $* 90$. Scribe in a kneeling posture, with his hands folded (inlaid eyes; 5th Dyn.) ; the nervous smile of the obsequious servant is admirably hit off.
N. side, to the left of the entrance: Cabinet $B$ : Statuettes from Gîzeh and Sakkàra. *78. Dwarf named Khnumhotep, 'keeper of the linen for embalming'; *79. Limestone statuette of Nefer, 'keeper of the corn for tribute', one of the finest examples of Egyptian sculpture of the 5th Dyn.; *80. Wooden statuette of a man in a cloak, the head unusually expressive (4th Dyn.).
E. side: 81. Limestone group of Neferhotep and his wife T'enteta.
S. side: 82. Limestone relief : $A p a$, governor of the palace, with his wife Senbet and his family and servants, on his journey to the region of the dead (6th Dyn.).
W. side : 83. Limestone relief: the two upper rows represent field workers, the third the making of wine and bread. In the lowest row are goldsmiths weighing gold and sculptors at work with their polishing stones. - 84. Limestone relief of boatmen quarrelling; 85 . Group of three persons, one a woman with remarkable ornaments (limestone); 86. Limestone relief of dancers and musicians.

In the middle of the room, N.E. side : Glass Case H: Amulets, votive gifts, and gold ornaments, found in 1889 by Prof. Flinders Petrie on a mummy at Hawara in the Fayûm. Below, in the corners, gold thumbs.

Glass Case $K$ (E. side) contains the **Jewels of Queen Aah-hotep, mother of Aahmes I. (18th Dyn., about 1600 B.C.), found with the mummy of the queen at Drah Abu'l Negga (Thebes) in 1860. From right to left: 946. Bracelet of gold adorned with heads of lapislazuli; 944. Richly ornamented diadem, with a cartouche and sphinxes; *943. Double-hinged bracelet, with delicately engraved gold figures on blue enamel representing King Aahmes kneeling between Seb and his acolytes; 962. Necklace (usekh) of gold, the links of which are in the form of coils of rope, cruciform flowers, antelopes chased by lions, jackals, vultures, and winged uræusserpents, while the clasps represent the heads of hawks; 945 . Pliable gold chain, 36 inches long, ending in the heads of geese; pendent from it is a scarabæus with wings, etc., of blue glass-paste striped with gold; 955 . Golden boat, resting upon a wooden carriage with wheels of bronze, and containing figures in beaten gold (the three chief figures are of silver); 956. Boat and crew, all in silver; 950. Axe with a handle of cedar-wood encased in gold inscribed with hieroglyphics; the solid gold blade is also covered with enamelled ornamentation; *951. Dagger and sheath, both of gold, a model of grace; the top of the richly jewelled hilt is formed of four female heads in gold, and the junction of blade and hilt is covered with a head of Apis; *953. Golden breast-plate inlaid with precious stones, and adorned with rich mosaics; 954 . Necklace of golden rosettes adorned with gems and almonds of gold; 949. Mirror (comp. No. 915); 947. Anklets; 964.Armlet, adorned with tarquoises; in front is a vulture with wings of gold inlaid with gems; 948. Fan of wood mounted in gold, with the holes left by the ostrich feathers with which it was originally furnished.

Glass Case F (S.E. side). Silver vases and bowls, from the ruins of Mendes (Tell-Tmaï), probably some of the temple-utensils, rfsembling in shape those represented in the wall-paintings of the 18-20th Dyn.: 923. Silver ornaments from the corners of a naos. Adjoining, Silver spoon with a figure of victory inlaid in gold (Græco-Roman period).

Glass Case in front of the S. wall: Utensils, figures, and other small objects of art. $900-900 \mathrm{~b}$. Rare sepulchral statuettes in bronze;
909. Head in blue porcelain (26th Dyn.); 908. Pretty head of a girl. The wooden flgures Nos. 904, 879, and 878 should also be noticed (in the left hand of 878 is the eye-amulet). - 888, 889. Perfumespoons. *891. Statuette bearing the name of Ptahmos, chief prophet of Ammon, in white ellamel inlaid with blue, yellow, and violet (20th Dyn.). This is perhaps the most beautiful sepulchral statuette that has been found. - Below, 896, 896b. Perfume-case ; the handle consists of a nude female flgure, holding a duck, the body of which is hollowed out to receive the perfume. *898. Wooden drinkinghorn; *902. Green enamel head of a bald man (Imhotep?), of the Saite period, known as 'the god with the beautiful face'.

Glass Case $L$ (W. side): Golden ornaments of various epochs. $972,972 \mathrm{~b}$. Valuable earrings; 974 . Broad band of thin gold, of the Greek (Ptolemaic) period, scale-covered ægis, with flite gorgon's face; 973. Breast-ornament of very delicate workmanship. Also bracelets, rings, and earrings of Syrian workmanship; 991. Persian; similar articles of Greek, Roman, and Byzantine origin.

Glass Case on the N. side: ${ }^{* *}$ Golden Ornaments of the princesses Hathor-Sat and Sent-Senbets (12th Dyn.), showing the high pitch of artistic skill attained by Egyptian goldsmiths about 2000 B.C.

These were found by M. de Morgan in March, 1894, in the N. brick pyramid at Dahshûr (p. 187). The principal pieces are: Gold Breast-Ornament inlaid in a mosaic style with cornelian, lapis lazuli, and turquoises; in the middle is the name of Usertesen II., supported on either side by a hawk perched upon the hieroglyphic symbol for 'gold', and wearing the Egyptian double crown. - Gold Breast-Ornament inlaid with gems; at the top is a vulture with outspread wings, representing Nekhbet, the patron-goddess of the king; below is the name of Usertesen 1II., to the right and left of which are two hawk-headed sphinxes, as symbols of the king, each trampling upon two foes. - Breast-Ornament of the same kind; at the top is the vulture, below is the name of Amenemha III., on either side of which the king appears, grasping a kneeling Asiatic by the hair and smiting him with a club. - Golden Shell, inlaid with coloured gems, on which are lotus-flowers. - Bracelet-Ornament in gold and coloured gems, showing the name of Amenemba III. - Scarabaei in gold, lapis lazuli, amethyst, and enamel. - Vase and lid, in obsidian ornamented with gold. - Gold Bracelets. - Couchant Lions, in gold. - Two Silver Mirrors, with gold ornaments. - Golden Shells, from chains. - Chains of Beads; etc.

Room VlII contains mainly reliefs. - In the S.E. corner: 91. Shepherds pasturing their flocks; below, shepherds and fishermen preparing for a meal. - In the S.W. corner: 92. The deceased Ankheftku, seated before a sacrificial table, receiving the gifts of his servants; beneath, animals for sacrifice are being slaughtered. - In the N.W. corner: 93 . Fruit-seller teasing an ape, which has seized him by the leg. - In the N.E. corner: 94. Boatmen, engaged in the transportation of fruit and other provisions, fall into a quarrel and attack each other with the oars. - In the middle of the room : 95. Wooden statuette of Tep-em-ankh, secretary of the palace, of excellent workmanship but much damaged; traces of painting perceptible (5th Dyn.).

Room IX. In the middle: 96. Large and very perfectly executed
sarcophagus in rose-coloured granite, of great antiquity, which once contained the remains of a priest of Apis named Khufu-ankh (4th Dyn.; from Gîzeh).

The sides recall the domestic rather than the sepulchral siyle of architecture, but in Egypt these styles were similar in many respects. The ends of the beams, resembling triglyphs (above the windows in the middle), should be noticed.
97. Sarcophagus in pink granite, with rounded corners, bearing the name of Prince Khamshem; 98. Large limestone stele of Tep-emAnlh (comp. No. 95), beside whom, on the right side, appears his son Tes-hon; 101. Wood-panelling with finely carved hieroglyphics. - South side. Case A: 102. Small boat, from Akhmîm (Panopolis); beside it, five other boats, of the 11th Dyn., found at Sakkêra; 103. Model of a granary; 104. Model of a small house with a court in front (both found at Akhmîm). 105. Small sacrificial chest, probably for the use of the priests; within it a small sacrificial table, and a number of vases, small knives, etc. (6th Dyn.).

Cabinets $C$ and $D$, in front of the windows, contain statuettes of the Early Empire (5th and 6th Dyn.).

Room X. 106. Mummy of King Mentu-em-saf (6th Dyn.); 107. Remains of the mummy of King Unas (5th Dyn.), from his pyramid (p. 165) ; 108. Arm of a wooden statue, from the Early Empire, of remarkably fine execution (covered with linen as a ground for a coating of painted plaster; comp. No. 19); 109. Reconstructed tombchamber of Deshera (6th Dyn.). All these are from Sakkàra.

Room XI contains steles from the 6th Dyn., from Abydos and Akhmîm. - Cabinet $A$ : Wooden statuettes and inscribed tablets.

Rooms XII \& XIII contain steles from Abydos, Akhmîm, Rizagât, and Meshaik, nearly all of crude execution, illustrating as it were the transition from the Early to the Middle Empire.

Room XIV. Monuments of the period of the 11th Dyn., also of crude workmanship, and marking the transition-period like the steles in Room XIII.

## b. Monuments of the Middle Monarchy and of the Hyksos Period (XII-XVIIIth Dyn.; 2380-1600 B.C.).

Room XV. E. side: 110. Stele of $K h u-u$, son of Antef (11th Dyn.), interesting to epigraphists on account of the still visible squares, marked upon it to ensure accuracy in the placing of the hieroglyphics and designs; 111. Stele of Prince Antef-a, governor of Thebes, found like No. 112 at Drah Abu'l Negga (Thebes); 112. Stele of King Antef (11th Dyn.), mentioned in the Abbot papyrus, which refers to the punishment of thieves who had violated graves at Thebes in the reign of Ramses IX.; 113. Relief representing King Mentuhotep slaying prisoners (11th Dyn.) ; 114. Tomb-chamber of Hirhotep; 115. Mummy of a singer (priestess) of Hathor, named Ament (11th Dyn.) ; 116, 117. Inner and outer coffin of No. 115.

Room XVI (Hyksos Room). S. side: 118. Limestone stele of King Menkhauri, worshipping the god Min of Koptos, an important monument of the period of the 14th Dyn.; 119. Fine sacrificial table of grey granite, with the cartouche of Amenemha II. (12th Dyn.); 120. Large limestone stele, with the name of Prince Mentuhotep and the cartouches of Usertesen I. (12th Dyn.).
W. side: 121. Carefully worked stele (limestone) with the name of Antef, partly in engraved, partly in raised characters (12th Dyn.); 122. Statue (granite) of Nefert, queen of Usertesen I. (12th Dyn.); 123. Sacrificial table consisting of a large block of sandstone with the name of King Ameni-Antef-Amenemhat (13th Dyn., Karnak).
E. side: 124. Head of a king, in grey granite (Zakâzik); 125. Colossal bust of a king of the Middle Monarchy, with the cartouche of King Merenptah of the 19th Dyn. afterwards added on the breast (grey granite); 126. Cast of the head of a king's statue from $\mathrm{Bu}-$ bastis, now in the British Museum (resembling No.124); 127. Double stele of Ra-shotep-ab, a high official under Usertesen III. and Amenemha III. (12th Dyn., Abydos); 128. Statue of King Sebek-em-saf, in pink granite (13th Dyn. ; Abydos); 129. Statue of the Hyksos King Raian, found at Zakâzik (upper part wanting); 130. Alabaster sacrificial table with the name of Princess Ptah-neferu, found in the Pyramid of Hawâra; 131. Sacrificial tablet of King Usertesen, from Karnak (granite); 132. Sacrificial tablet of the Hyksos King Apepi, in black granite.
133. Double statue of grey granite, found at Tanis and dating from the Hyksos period.

Two foreign-looking figures are standing before the sacrificial tables, which are lavishly adorned with aquatic plants (Baskhuiu), fishes, and birds. The features of the figures resemble those of the sphinxes; their matted beards, their plaited hair, and the bracelets on their arms distinguish them strongly from the figures on other Egyptian monuments. The name of Psusennes, engraved both on the front and on the back of the monument, was added at a later date.
**134. Hyksos Sphinx in black granite, from Tanis, the restored parts recognisable by their darker hue.

The head shows the coarse and foreign-looking features of the race which oppressed Egypt for so long a period. An inscription on the right shoulder, almost effaced, mentions Apepi (Apophis), one of the last Hyksos kings. Merenptah, the Pharaoh of the Exodus, and Ramses II. subsequently caused their names to be inscribed on the base, and Psusennes (?), of the 21 st Dyn., engraved his on the breast of the statue.
135. Head of a sphinx, resembling the preceding, with the name of Merenptah, added at a later date; 136. Sacrificial table in black granite, with the name of King Usertesen $1 I I$; 137. Torso of a Hyksos statue in grey granite, found in the Fayûm; 139. Hyksos Sphinx, in limestone, found at El-Kàb, resembling No. 134. - 140. Large limestone sarcophagus from Thebes, of which a drawing was made by Lepsius in 1842 , but which was afterwards again lost under heaps of rubbish and not rediscovered till 1882. It belongs to the 11 th Dyn. and was made for a person named Tagi. The interior is
adorned with numerous inscriptions and scenes relating to the worship of the dead, most of them in good preservation. - 141. Limestone door of a tomb, from Assuân (12th Dyn.).

Room XVII. Glass Case A contains steles from the 12th Dyn., with admirably preserved colouring. - In the middle of the room are wooden coffins of the 11 th and 12th Dyn.; 142. Coffin of Kheperka with careful representations of the façades of wooden buildings, the ornamentation of which should be noticed. - 143. Alabaster sacrificial table with the name of King Usertesen I.

Room XVIII. Portions of wooden coffins, dating from the Middle Monarchy.

Room XIX. Wooden coffins of the 11 th and 12 th Dyn.; sacrificial tablets, and numerous limestone steles from Abydos.

Rooms XX and XXI. Sacrificial tablets and steles from Abydos.
c. Monuments of the New Empire (XVIII-XXXth Dyn. ; 1600 B.C. to the Conquest of Egypt by Alexander the Great).
Room XXII. 145. Fragment of a limestone relief, with the name of Ramses II. ; 146, 147. Two arms from a colossal pink granite statue of Ramses II., found at Luxor; 148. Large scarabæus of pink granite, on a massive block of granite.

Room XXIII. On the walls, steles and reliefs: 150. Limestone relief of King Khu-en-aten (18th Dyn.) worshipping the sun; 153. Seated statues of Ramses II. and the god Ra-hor-lihuti (pink granite), found in the temple of Ptah at Memphis in 1892.

Room XXIV. *155. Sacred boat, of pink granite, found in 1892 in the temple of P tah at Memphis, a most rare and beautiful specimen; 157. Fragment of an inscription on pink granite, relating to the revenues of the temple at Bubastis (22nd Dyn.).

Room XXV (Ethiopian Room). 160. Stele of Piankhi, in pink granite, covered with inscriptions (23rd Dyn., Gebel Barkal).

In the 8 th cent. B.C. the power of the Ethiopian monarchs extended to Thebes, while several native princes still maintained themselves in $N$. Egypt. One of these named Tefnekht organised a rising against the usurper Piankhi, but was finally conquered and forced to yield to the Ethiopian, who, after pacifying the country, returned to his capital Napata.
161. Stele of Hor-sa-atef, in grey granite, from the end of the Persian period (Gebel Barkal).

The king gives an account of the wars carried on by him against the tribes dwelling between Abyssinia, Dârfûr, and the Red Sea, particularly of the expedition to the Gebel Barkal in the 6th year of his reign.
162. Stele of King Amen-meri-nut, recounting a campaign undertaken by him at the instigation of a dream (26th Dyn.).
E. side: 163. So-called Coronation Stele, of King Aspalut (Persian period). - 164. Portrait-head in dark granite of Taharko (the Tirha-
kah of the Bible), the Ethiopian conqueror (25th Dyn.) ; negro cast of features, nose mutilated. The same negro cast is clearly seen in the relief of this king on the under-mentioned Asarhaddon stele.
W. side: 165. Tablet known as the Stele of Excommunication, 166. Dark granite head, from a colossal statue of Ramses II. (Luxor).

In the middle of the room: 167. Pink granite statue of King Merenptah (19th Dyn.); 168. Limestone stele of the time of Ramses IV., mentioning the 67th year of the reign of Ramses II.
E. side: 169, 170, 171. Reliefs from the 18th Dyn. (Gîzeh); 172, 172 b . Reliefs from the tomb of Hor-min, representing a funeral; 173. Relief of a funeral and funeral dance. - *174. Alabaster Statue of Queen Ameniritis, on a base of grey granite. The cartouches (effaced) are those of her father Kashta and her brother Shabako (25th Dyn., Karnak).
S. side : Coloured cast of the Asarhaddon Stele, found at Sengirli, and now in the Berlin Museum.

On the front of the stele appears the Assyrian king Asarhaddon (Esarhaddon; 681-668 B.C.), in royal garb and wearing the Assyrian crown, holding a mace and a fan (?). Before him stand the defeated Pharaoh, Taharko (bearded and with the royal serpent on his brow), and a Syrian prince (with beard, crown, and long robe), with cords fastened to their lips and held by the victorious Asarhaddon in his left hand. On the side of the stele is an Assyrian court-official with folded hands. The inscription begins by invoking the gods and reciting the titles of Asarhaddon, and gives a minute account of the conquest of Egypt and Ethiopia after the defeat of Taharko at Memphis.

Room XXVI. - S.W. Gallery: 175. Bust in grey granite, from Pithom; 176. Head from a statue of Ramses II., with the Atef-diadem, 177. Head from a statue of Ramses $I V$. (both of syenite and found at Bubastis).
W. Gallery: 178. Cynocephalus (dog-headed baboon) in pink granite, a fragment from the pedestal of the obelisk of Luxor; 179. Double statuette in limestone, Taï and his sister Naï, sitting; at the back the same figures are represented in the act of receiving sacrificial gifts from Tinro, priestess of Ammon (19th Dyn., Sakkàra); 180. Drums of columns with the name of Ramses III.; 181. Pillar from a tomb at Sakkâra, showing two Tat-amulets with the Atefdiadem (19th Dyn.); 182. Red sandstone pillar with representations on all four sides, Ramses II. offering libations to Ammon and the goddess Muth; 183. Black granite group of Ammon and Muth seated side by side, with dedicatory inscription of King Seti I. (19th Dyn.); 184. Large limestone stele, containing a prayer of Ramses IV. to the deities of Abydos.
N. Gallery, N.W. and N.E. corners of the room: *185, *186. Large sandstone statues of Ptah, found in 1892 in the temple of Ramses II. iu Memphis ( 7 ft . and 101/2 ft. high respectively); 187. Head from a grey granite statue of a king; 188. Head of a grey granite statue of Amenhotep II.; 189. Limestone naos of Nekht, who bore the unusual title of 'first royal son of Ammon'. 190. Bust
from a sandstone statue; the inscription begins with the title 'reverend chief' (name wanting; 13th Dyn.). 191. Limestone head of a king ; the eyes were inlaid (Karnak). 192. Bust of Tutmes IIl. (pink granite; 18th Dyn.); 193. Limestone stele, with the name of Amen-mes (18th Dyn.). - 194, 195. Two limestone figures, in a crouching posture, of Khaï, keeper of the treasures in the mortuary chapel of Ramses II. No. 194 holds a small shrine with an image of Osiris, and No. 195 another with an image of Ra. - 196. Sitting colossus of a king, in grey granite, with the cartouches of Ramses II., but probably dating from an earlier period; ${ }^{*} 197$. Fine head in black granite with mild and regular features, held by Mariette to be the Pharaoh of the Exodus (Merenptah), but according to Maspero the Pharaoh Horemheb; *198. Limestone head of Taïa, found at Karnak along with No. 191 (see above); 199. Group in limestone of a man and wife seated side by side, the former 'leader of the archers', the latter 'priestess of Ammon' (19th Dyn.). 200. Naos of dark granite; in the centre is the chief priest Ptahmes, with the name of Tutmes III. on his breast and shoulders. 201. Bust from a limestone statue of a king, a fine work of the 18th Dynasty.
E. Gallery : 202. Pink granite statue of Tutmes III. (feet wanting; 18th Dyn.); 203. Limestone stele, Hori worshipping Anubis, and Seti I. making offerings to Osiris and Isis (19th Dyn.); 204. Relief with the name of Tutmes I., in beautiful hieroglyphs; 205. Limestone statue of a crouching scribe, named Amenhotep, from El-Hibeh (Kheb; 18th Dyn.) ; *206. Limestone statue of Amenhotep 1I. (18th Dyn.), with inlaid eyes; 207. Limestone stele of the sun-worshipper King Khu-en-aten (Amenophis IV.; comp. Nos. $89,92,98,105$, etc.), with his wife and daughter, adoring the sundisk (18th Dyn.); 208, 209. Door-posts from the temple of Abydos, with the name of Ramses II. (pink granite); 210. Grey granite statue of the lion-headed goddess Selhet, bearing the name of Amenhotep III.; 212. Fragment of a limestone statue of the architect of Amenhotep III.
**213. Celebrated stele of the time of Tutmes III., in black granite (19th Dyn., Karnak).

The upper part of the inscription was erased by Khu-en-aten, who overthrew the worship of Ammon in Thebes, or by some other early monarch, but was afterwards restored, perhaps by Ramses II. The traces of this double change are distinctly visible on the upper half of the stele. Below is an inscription in 25 lines celebrating the victories of Tutmes IIl. in a highly poetic manner. This monument was often copied by subsequent dynasties to celebrate the exploits of Seti I. and Ramses III.
214. Black granite statue of Tutmes III. (18th Dyn.); 215. Fine pink granite stele of Pu-em-ra, second prophet of Ammon (18th Dyn.).
S.E. Gallery : 217. Black granite serpent, guardian of the temple of Hor-khent-khiti at Atbribis (Benha), with the name of Amenhotep III. (18th Dyn.).

Central court: Two colossal heads in pink granite, from the temple of Mitrahîneh (18th or 19th Dyn.); large sandstone stele of Khu-en-aten (p. 106), 'usurped' by Horemheb (18th Dyn.), i.e. provided with his cartouche ; fragment of an obelisk with the name of Ramses IV., probably from Heliopolis.

Room XXVII (Gallery) contains steles and inscriptions of the 18-20th Dynasties. - *218. The celebrated Tablet of Salkhâra (limestone). This tablet was found in 1861 in the tomb of Tunari at Sakkâra. On one side is inscribed a hymn to Osiris and on the other a list of 58 kings, in two rows, beginning with Merbapen (1st Dyn.) and ending with Ramses II. The list is unfortunately very imperfect. - 219. Stele of Un-nefer, first prophet of Osiris.

Room XXVIII. (Open court): 223. Pink granite colossus in the form of Osiris, with the name of Usertesen 1. (12th Dyn.); 224-227. Colossal statues, on which the cartouche of Ramses II. was placed at a later date (No. 224 from Abuḳirr; the rest from Tanis).

Room XXIX (Gallery): 228, 229. Four small fragments of limestone pillars from the tomb of a dignitary named Hor-em-heb with his titles; on his head the Uræus-serpent (19th Dyn.). *230. Sandstone relief of Amenhotep III. before the god Ptah, an admirable piece of work.

Room XXX. - 231. Painted statuette of the mother of Tutmes II., in a sitting posture; 232. Limestone cinerary urn, with name Tamat, i.e. 'the cat' (a cat is represented before the altar in place of the deceased), found at Mcmphis in 1892. 233. Small stele, with the scribe Pa-shot before Prince Djmes; on the upper part of the stele is the goose sacred to Ammon and the cat sacred to Muth. 234, 235. Limestone steles from the temple of Prince Ujmes at Thebes; 236. Small relief of the queen of Arabia (Punt); the racetype (hips very prominent) and the folds of the skin somewhat exaggerated; 237. Kelief of the ass of the preceding; 238. Stele with the names of King Aahmes and Queen Aah-hotep (18th Dyn.). 239. Limestone stele; above, King Aahmes and Queen Aahmes-nefer-ta-ari, and King Amenhotep I. and Queen Aahmes-nefer-ari; beneath, Hui and Smentaui worshipping Aahmes and Amenhotep (18th Dyn.). 240. Limestone stele, with two priests praying in front of a rounded obelisk surmounted by a hawk.

Room. XXXI (Saïte Period). In the middle of the room : 241. Granite sarcophagus, with the name of Psammetikh II.; 242. Sandstone altar, with the name of King Apries.
E. side: 245. Granite naos or shrine, with the name of the Ethiopian king Shabako (26th Dyn.).
W. side : 201. Grey granite statue (headless) of the ship-captain Samtaui Tafnelht, in a sitting posture, with crossed legs; on the arm is the cartouche of Psammetikh I.

Room XXXII. 252. Naos hewn from a single block of grey
granite, crowded with inscriptions and representations; the top is wanting (found near Bubastis). 253. Naos of black granite, with the cartouches of Nectanebus I. " 254 . Two bas-reliefs of the Saïte period, found in ancient Memphis; one represents the scribe Psam-tik-nefer-sa-mer superintending the transportation of gold ornaments intended for his tomb; the other shows him receiving votive offerings. 25'7. Frieze, with the names of Queen Shep-en-apt and her mother Ameniritis; 259. Fragment of a small obelisk of pink granite, with the name of Nectanebus I. (from Heliopolis).

Room XXXIII. Steles from Sakkâra, Abydos, and Akhmîm.
Room XXXIV. Steles, chiefly from Abydos.

## d. Monuments of the Ptolemaic, Roman, and Coptic Periods ( 4 th cent. B.C. to the 4 th cent. after Christ.).

Room XXXV. 271. Fragment of an obelisk of grey granite, erected at Napata to Ammon, bearing the cartouche of King Atalnarsa; 272. Group in grey granite of the god Ammon and an Ethiopian queen (Meroë), of the latest period of Egyptian influeuce in Ethiopia.
W. side: 273. Beautiful stele, in granite resembling porphyry; 274. Three steles from Hassaïa, finely executed and with wellpreserved colouring; 275. Frieze of the Ptolemaic period, with the sun-disk.
N. side: 276. Limestone relief, much damaged so that only a few letters of the Greek inscription are now legible.
E. side : 277. Stele from Akhmîm; stele from Hassaïa, painted and gilded; sacrificial tablets; four small votive pyramids.

Room XXXVI. E. side: 278. Large granite stele from Pithom; 279. Finely worked limestone stele from Akhmîm.
S. side: 280, 281. Small sandstone steles from Assuân; 282. Fragment of a gilded limestone pillar from Pithom.
W. side: 283. Large granite stele, found in 1870 among the foundations of the mosque of Shêkhûn at Cairo; it is dated in the 7th year of the reign of Alezander II. (son of Alexander the Great) and contains an expression of gratitude to Ptolemy, son of Lagos, for the recapture and restoration of the temple-treasure which had been carried off from Buto by the Persians. 284. Stele found by E. Brugsch-Bey at Mendes in 1870, by means of which the exact position of the ancient city could be determined.

Room XXXVII. Steles with demotic inscriptions. In the middle of the room : 285,286 . Two small coffins for the mummies of animals. By the N. wall : Fragments of statues of the Ptolemaic and Roman periods.

Room XXXVIII. Steles of the Ptolemaic and Roman periods. On the W. side : Statue of the god Bes.

Room XXXIX. Steles of the Greco-Roman period, including 287 and 288 (the latter with Greek verses). The eagle on the $W$. side was found in the Greek Serapeum at Memphis (comp. No. 295 in R. XL).

Room XL. *289. Beautiful limestone stele, showing a woman in a mourning attitude, handing a cithara to her daughter; a Greek work of the 3rd cent. B.C., Attic in character though found at Alexandria.
*290. The famous Decree of Canopus, found at Tanis (and usually called the Tablet of Tanis, to distinguish it from another copy in the Louvre).

This tablet confirmed the correctness of the method of deciphering discovered by the celebrated Champollion and employed by Egyptologists since the finding of the Rosetta Stone (p. 225). On the limestone pillar are inscribed three different versions of the same decree; above it appears in hieroglyphics, or the Ancient Egyptian written language, below in Greek, and on the margins in the popular dialect written in the Demotic character. The decree was pronounced by an assembly ot the priests in the temple of Canopus on 7th March (17th Tybi), B.C. 238, in the reign of Ptolemy III. Euergetes I.; it praises the king for having bronght back the images of the gods from Asia, gained many victories, preserved peace in the land, and saved it from imminent famine by his forethought in importing corn; and it concludes with a resolution that the assembly shall call itself 'the priesthood of the Euergetes of the gods', found a new sacerdotal caste to be named after Euergetes, institute new festivals in honour of the king and queen, and introduce an improvement in the popular calendar. It is also resolved to pay permanent honour in all the temples throughout the country to the Princess Berenice, who died young and unmarried, and to celebrate certain festivals yearly to her memory. In all temples of the first and second rank costly and beautiful stataes were to be erected to the 'princess of virgins', to which various services were to be rendered and offerings presented. Her praises were to be sung by specially trained choirs, and chiefly by virgins, and the bread provided for the priestesses was to be stamped 'bread of Berenice'. The inscriptions lastly declare that the decree is to be inscribed on slabs of bronze or of stone in the holy (hieroglyphic), the Egyptian (demotic), and the Greek languages, and to be exhibited conspicuously in every temple of the first and second rank.

290 b . Another copy of the same decree found at Kom el-Hizn (Lower Egypt) in 1881. The representations above the inscriptions show the royal family in adoration before the gods of Egypt. Over the central E. window : no number, *Colossal female head (Demeter or Kora?) of Greek marble, an admirable Greek work of the 4th or 3 rd cent. B.C. (only the face and throat preserved).
**291. Marble head of $a$ Gaul, an original Greek work of great beauty, dating from the beginning of the Ptolemaic period.

This head may be compared with those of the Dying Gaul in the Capitoline Museum and the Group of Gauls in the Museo Boncompagni-Ludovisi at Rome, though it is evidently by a different hand. The treatment of the marble is freer and bolder; the back of the head and neck are bnt partly worked. Only the head, throat, and part of the drapery are preserved. They appear to have belonged to a statue of a man represented in the most energetic movement, probably fighting. The head is thrown back towards the right shoulder and the eyes look upwards in keen excitement. The stiff hair pashed off the brow, the moustache, and the beard on the chin proclaim the Ganl; in other points the face is more
idealized than in the closely related Roman heads. The marble appears to be Greek.
292. Block of close-grained sandstone, with a frieze containing the cartouches of Psammetikh I. and Shabako. Below is a long Greek inscription with the names of the emperors Valens, Valentinian, and Gratian. This stauds on No. 293, a quadrangular base of red granite, with a Greek inscription dedicated to Antinous by a governor of Thebes. - 294. Black basalt statue of the Egyptian scribe Hor, carved under Greek influence, though furnished with a hieroglyphic inscription.
*295. Siren playing the lyre, a figure of great rarity, found in the Greek Serapeum at Sakkâra.

This was found with a series of seated portrait-statues, figures of gods, etc. (comp. R. XXXIX and p. 166), all executed in a parely Greek style, which, however, differs essentially from that of the Head of the Gaul or of the tombstone No.289. The breast and neck of the siren are adorned with jewels, and she wears earrings of a shape frequently found in tombs (comp. R. VII, Cabinet L). From the chain on the fosom are suspended amulets. The strap round the waist held the lyre, with which the arms (formed of separate pieces and now wanting) were occapied. The attitude of the body and the head thrown back indicate the passion of the funeral singer. The feet and half of the nose are restored.

296, 296b. Monuments from Memphis, referring to the worship of Mithras; 297. Granite basin, found on the island of Elephantine; 298. Large porphyry statue in the late-Roman style (Alexandria; head wanting) ; 299. Marble stele with a Greek inscription recording the names of citizens of Memphis who had erected a monument to a high functionary in the temple of Ptah; 300. Graco-Roman marble statue; 301. Granite altar from Ptolemais, of a specifically Græco-Egyptian shape; 302. Porphyry bust of a Roman emperor, perhaps Maximian Hercules (304-310 A.D.); beside it is a Roman portrait-bust, completely polished, from about the reign of Trajan; 303. Marble statue of a Roman lady; 304. Granite stele, with the name of the Emperor Trajan (from Ptolemais). - *306. Colossal marble face of Serapis (only the face and portion of the throat preserved), the new national god introduced by the Ptolemies (comp. Introduction, p. clxxxi), erroneously named 'Nile God'. The hair falling over the brow and cheeks and the earnest and severe expression give this god of all good and of earthly blessings (whence the modus on the head; comp. the terracottas in R. XLIII, Case C) also the characteristics of the ruler of the underworld. The execution of the head is dry and refers it to the Roman period (Italian marble), but an earlier model has been used, perhaps the figure in the Serapeum at Alexandria (Introd., p. clexxiv). - 310. Relief from Luxor of Isis and of Serapis killing a gazelle (perhaps a form of the god Antæus), a late-Roman work.

Rooms XLI and XLII. Monuments of the Coptic Christian period, the most important being Nos. 311-314.

We return to Room XL (p. 109), whence a staircase ascends to the upper floor. - On the staircase, marked XLIII on the plan: -



Alexandrian Terracottas and Greco-Roman Glass.
This collection, which consists mainly of terracotta figures found in Alexandria and connected with the cults of that city, is the largest of the kind in existence, next to that in the museum at Alexandria. It contains a number of rare types, the most important of which are mentioned below; the method in which the collection is numbered and arranged renders it difficult to indicate individual specimens.

Cabintt A contains almost exclusively representations of Harpocrates, the divine son of Osiris and Isis and therefore fnrnished with the princely lock of hair; also frequently with his right forefinger on his lips. He appears in innumerable forms: sitting or standing, with the urn, on horseback, on the goose, or on the Uræus-serpent, as a warrior, etc. ; once (No. 315) with a hieroglyphic inscription.

Cabinet B. Top row, to the left: Nubian slave with basket of fruit. Central compartment: Isis ending in a serpent's body; Aphrodite beside the bath; sphinx. - Second row: Figures of Priapus. Central compartment: Serapis seated with Cerberus by her side, Isis, Canephora, etc. - Third row, to the left: in front, Selection of heads of caricature figures (Grylli), which appear to represent comic personages, dwarfs, and also characters from the Alexandrian stage. Central section: Isis suckling the bull; Demeter with the torch; Zeus borne by the eagle. - Fourth row, central section, and below: Large number of dancing temple-attendants (hierodules). Bottom row, to the left : representations of the god Bes. The right compartment of the case contains figures of animals.

Cabinet $C$. In the two top rows: Vessels of various shapes. Third row : Lamps in the shape of altars, houses, etc. Fourth row : 318. Lamp ('bilychnos'), with medallion in relief representing a Nile scene in a grotesque manner; grylli in a boat, with water-fowl and lotus-plants.

Cabinet D. Vases, bowls, goblets, bottles, and ewers of coloured glass, some reticulated with glass-threads; a few moulded. No. 330 has an engraved design.

Cabinet E. Top row: Zeus, Athene, Isis. - Fourth and fifth rows : All kinds of genre figures: Girl reading a book; priests carrying the sacred boat or an altar; peasant on a mule; sitting slave, etc.

## The Uppra Floor

contains the smaller antiquities and most of the mummies of kings and priests of Ammon found in 1881 and 1891.

## a. Græco-Roman Objects.

Room XLIV. Cabinets $A$ and $B:$ Mummies from Panopolis (Akhmîm). - Cabinet C: Mummies from the Fayûm, adorned with gilding. 334. Mummies of children; a portrait painted on linen here takes the place of the gold mask (2nd cent. after Christ). 335.

Mummy of a child, with a portrait painted in wax-colours on a thin wooden tablet. - Cabinet D: 336. Statuette of Venus (the lower part restored); terracottas; handles of amphoræ; seals. - Cabinet E: Glass vessels; bronze vases, fragments of bronze caskets, etc. Cabinet F: Mummies with portraits, from the Fayûm, among which No. 337 may be specially mentioned, and the still finer female portrait beside it to the left, a veritable masterpiece. - Cabinet $G$ : 338, 339. Lamps. 340-343. Candelabra, in shape, decoration, and workmanship resembling those found at Pompeii and Herculaneum; the common model seems to have originated at Alexandria. Cabinet $H$ and I: Mummy-masks, some coloured, some gilded, from Meïr and the Fayûm. - Cabinet J: 345. Two triangular stucco basreliefs of sirens, painted and gilded, resembling the one found in the Serapeum (these reliefs belong to the coffin No. 394 in R. XLV); 346, 347. Wooden tablets coated with wax, inscribed with seven lines in the Homeric style; 348. Two bronze military diplomas of the reign of the Emperor Domitian, found at Koptos. Above, wooden tablets from coffins, bearing the names of the deceased; 351. Fragment of a limestone statuette of Alexander the Great(?) as Hercules, of inferior workmanship though Greek; the upward glance is a characteristic motive in Hellenistic art (comp. the Gaul's head, No. 291, R. XL). - Cabinet K: Mummies from the Fayûm and Upper Egypt.

Cabinet $L$ : Mummies and mummy-'cartonnages' from the Fayûm; 354. Mummy, with garlands ; 355 . Similar mummy, with the name Artemidora several times repeated on the linen bandages; 356. Leadeu coffin, from Alexandria; 357. Mummy with portrait painted in the encaustic style upon wood; 358. Mummy with gold mask and garlands; *359. Richly gilded mask in remarkable preservation, with genii of the dead executed in enamel (from Meïr); 360. Mummy, with portrait upon wood in tempera and therefore liable to injury from water ; the wrappings are of pink cartonnage, with gilding. Adjacent (Nos. 1315-1320) are a number of glass-cases with recently discovered face-masks, from the coverings of mummies, all in good preservation.

Cabinet M: Greek, Byzantine, and provincial (nomos) medals. - Cabinet N: Medals of the Roman period.

On the top of Cabinets $A, B, C, F, K$, and $L$ are a number of terracotta vessels, including a series remarkable for the white colour of their exterior, some showing traces of bright colours. One specimen (on Cabinet B) exhibits two carefully painted leather boots. These vessels are cinerary urns, the last-mentioned perhaps that of a schoolboy.

Room XLV. - Cabinet $A$ : below, 362. Handle of a terracotta brazier; beside it are otherspecimens. 363.Two inscriptions upongranite, dedicated to the temple at Koptos by Roman soldiers, dating from the beginning of the reign of Augustus. Second section: Terracotta
flasks of the Roman period (No. 364 is from Epirus); 366. Bronze hilt of a Roman sword; 367. Two-edged axe; 368. Early-Greek or Cyprian statuette in alabaster, from Saïs; 369. Terracotta relief of a recumbent goddess, perhaps a modern forgery, like Nos. 371-374, 377-379. - Third section: Vases, statuettes, lamps, terracotta reliefs; 375. Enamelled Vase, with yellow decoration on a pale green ground, of the Greco-Roman period.

Cabinet B: Vases and portions of statuettes. 381. Tasteful small stele of limestone, in the shape of a naos, a votive gift from an interpreter of dreams; 382. Mosaic fragment. Above it, Small marble head of Serapis, related in type to the colossal head in R. xl, but of very inferior Roman workmanship (in the right division of this case is a somewhat more carefully executed bust of Serapis in alabaster). To the right of the Serapis head is a fine torso of Venus, of the Ptolemaic period (Greek marble), preserved to below the waist. Various utensils and figures in blue enamelled earthenware. *383. Small alabaster figure (much injured) of Venus untying her sandal, of a type perhaps of Alexandrian origin. - Between Cabinets B and C:384. Serpent from the temple of esculapius at Ptolemais (head restored). - Cabinet C: Greek vases, chiefly from the 6 - 4 th cent. B.C., some manufactured in the potteries of Naukratis, and some imported from the Greek motherland. The vases with red figures are the latest, those with brownish-red figures on a greyish-yellow ground are the earliest. - Cabinet D: Alexandrian terracottas. In the two top rows are specimens of the favourite grotesque caricature figures; in the two beneath, figures of Venus. Cabinet E: Works in ivory, chiefly fragments of caskets, on some of which traces of painting may be seen. - Cabinet $F$ : Alexandrian terracotta statuettes, resembling the Tanagra figures, and obviously in some cases modelled with Tanagra forms. No. 385, one of the best, represents a faun lying on a wineskin on the ground, from the mouth of which he permits a stream of wine to escape.

Cabinet $G$ : Vases and statuettes. 386. Blue enamelled terracotta vase; 387. White marble statuette of Isis in a standing position (right arm wanting); 388. Fragment of a fine Greek vase; 389. Bronze incense-burner; 390. Statuette in black granite of Isis, of the Ptolemaic period (feet wanting; the eyes were inlaid); 392. Round limestone incense altar (ashes still preserved), with tasteful base; 393. Earthen pot with bronze coins of the reigns of Diocletian and Constantine.

Cabinet $\boldsymbol{H}$ : Bronze statuettes of the Græco-Roman period; 394. Wooden coffin, with a lid in the form of a roof, in good workmanship of the Greek period; the two triangular end-pieces are adorned with stucco-reliefs of sirens, painted and gilded (comp. No. 345, R. XLIV); 395. Wooden coffin of the Roman period, with garlands all round, and at the foot, a figure of Anubis, with a tree behind; 396. Small mummy, with portrait of a girl on wood; 397. Two

Baedeker's Egypt I. 3rd Ed.
mummies of the latest Egyptian period (3rd or 4th cent. after Christ), remarkable for the Christian and Egyptian emblems in relief; 398. Mummy of a girl, with portrait; 399. Four crudely executed granite statues, with Greek and demotic inscriptions, from the time of Trajan; 400. Coffin-lid, with painted Osiris-figure; 401. Linen mummy-covering, with female portrait. - Room XLV b (closed) contains monuments not suited for public exhibition, and ostraca with inscriptions. - We return to Room XLIV and enter Room XLVI (Gallery), to the left.

## b. Coptic Objects.

Room XLVI (Gallery) : Textile fabrics and embroidery.
Room XLVII. Cabinet A: Religious inscriptions on parchment, wood, potsherds, etc. - On the W. wall are three Coptic papyri.

Cabinet $B$ : Bronze church-utensils; 402. Cruciform candlestick; 403, 404, 405. Incense-burners. - Cabinet C: 406, 407. Church-lamps; 408, 409. Bronze pots, vases, and flasks; 410. Chandelier. - Cabinet D: 411, 412. Church-keys; 413. Bronze cymbal with bell; 414. Painting upon wood, with an Arabic-Coptic inscription of the 10 th century.

Cabinet E: Wooden combs; 415, 416. Terracotta vases of St. Menas; 417. Small limestone relief with Christian symbols. Terracotta and bronze lamps, including two in the form of doves (Nos. 418, 419).

Between the windows: 420-423. Wood-carvings. - In the middle of the room is a chain ornamented with crosses.

Room XLVIII. Coptic pots and vases. 424. Large and richly decorated vase; 425, 426. Supposed to be stoves. - On the walls are wood-carvings and sepulchral steles. 427. Coptic inscription found at Dêr el-Bahri in a grave used as a chapel; the text consists of a tirade against heretics and the usual prayer for the emperor and his family. 428-430. Coptic mummies; the shape of the head of No. 430 is peculiar.

## c. Objects of foreign origin found in Egypt.

Room XLIX. 431. Wooden coffin with Himyaritic (old-Arabic) inscription.

Cabinet A: Vases with Phenician inscriptions; No. 432 has also a demotic inscription.

Glass-Cases $B$ and $C: 433,434$. Small clay tablets with cuneiform inscriptions, being letters from the kings of Babylon and other Asiatic princes to the apostate Khu-en-aten (Amenhotep IV.; 18th Dyn., about 1500 B.C.; comp. p. eviii).

These tablets, which are of great historical importance, were discovered at Tell el-Amarna in 1888 . In Nos. 10 and 19 Jerusalem is mentioned as a place of importance. A considerable number are also in London, Berlin, Paris, and St. Petersburg.

On the N. wall: 435. Tablet with cuneiform inscription; 436. Sacrificial tablet, with Meroitic inscription. - E. wall: 437. Jewish cinerary urn.

Cabinet $D: 438$. Limestone naos in the Persian-Egyptian style; 439. Bronze handle (?); 440. Small Persian sphinx ; 441, 442. Phœnician and Aramaïc papyri; 443. Babylonian clay cylinder, with an inscription mentioning buildings of. King Nebuchadnezzar in Babylon; 444. Slab of slate with designs resembling hieroglyphics; 445. Lord's Prayer inscribed on stone in Early-Syrian.

We now return through Gallery XLVI to RR. XLIV and XLIII, and thence by the N.W. door to Room L, with which the purely Egyptian section begins again.

## d. Egyptian Weights, Measures, Tools, Domestic Utensils, etc.

Room L. 446. Liquid measure in alabaster holding almost half a litre, from the reign of Tutmes III. 447. Grey granite weight in form of a calf's head, with the cartouche of Seti I., found at Cairo; the head has been purposely chipped so as to reduce it to the exact weight of 300 utes. 449-451. Stone-mason's square and plumb, of the 20th Dyn.; 455. Small scale for an apothecary or goldsmith.

Glass-Case B: Building-utensils. 456. Dove-tail from the temple of Abydos (period of the 19th Dyn.); 459. Wooden model of a temple or palace pylon; 460, 461. Terracotta models of houses, showing that the natives of Kurna (Thebes) have not essentially improved upon the houses of their ancestors; 462. Window-grating (other specimens in Case C, Nos. 465, 466).

Glass-Case C: 463, 464. Fragments of a unique limestone altar from Tell el-Yeh ûdîyeh (p. 215), painted and enamelled, and ornamented with lotus-flowers (20th Dyn.); 467. Wooden door from the tomb of Sennot'em at Thebes, with paintings of scenes from his life (No. 449 was also found in this tomb).

Room LI. Cabinets $A$ and D: Bronzes. - Cabinet B: Beads, enamels, mosaics; including 469. Fragment of an earthenware slab with flowers on a white ground, of delicate workmanship. - Cabinet C: 463. Enamel from Tell el-Yehûdîyeh; 472. Border of lotusplants; *475. Captive Negro; *475b. Asiatic in coloured garments (Tell el-Amarna). - Cabinet E: Stamped bricks. - The wooden apparatus in the corners of the room was used for moving sarcophagi.

Room LII. Wooden bedsteads, seats, and footstools. 481-483. Sides of boxes, inlaid with ivory; 484-487. Feets of chairs and bedsteads, in limestone, granite, and enamelled earthenware. - Cabinet $C: 491,492$. Spindles and distaffs, in wood and bronze; 495. Spool, with two carved heads.

Room LIII. Furniture. Cabinet D:508. Variegated basket, such as are still woven in Upper Egypt. - In Frame $G$ : Mountings of a door.

## e. Drawing and Sculpture.

Room LIV. Drawings on potsherds and limestone tablets. 524. Fine head of a Pharaoh; 526, 527. Ramses IV. as conqueror of barbarians; 533. Princess; 539. Drawing exercises, to practise various motions and positions; 550. Hathor-cow; 552. Two forms with water-plants on their heads, representing the two banks of the Nile.

Room LV. Sculpture. Cabinets $A, B, C$ : Sculptors' models for instruction in the decoration of temples and tombs. - Cabinet D: Models for pupils, etc.

Cabinet E: Twenty-nine models to teach the art of representing a king's head; fifteen, found at Sakkâra, form a regular series of progressive exercises. No. 563 shows the first indication of the proportions, and No. 569 the first treatment of the limestone. Nos. 571, 572-575. Sketches and unfinished statues.

Show-Case F: Moulds for sepulchral statuettes, incense-holders, and amulets. At Nos. 557-580 both the moulds and the finished casts are shown. Most of the moulds, made of a composition of lime or alabaster, produce figures of the bird Bennu, which was sacred to Osiris, and at a later date gave rise to the Greek legend of the Egyptian phœnix (p. cxlix); perhaps the moulds were used also for sacrificial cakes, thus visibly expressing the idea of the new birth.

## f. Manuscripts, etc.

Room LVI. Ostraca with inscriptions. As papyrus was expensive, writings were frequently committed to wooden tablets (582, 583 ), potsherds (584, 585), or limestone. No. 586, from the tomb of Sennot'em (comp. No. 467, p. 115), contains the beginning of the 'Adventures of Sinuhit', an early Egyptian romance, the end of which was found in a papyrus now at Berlin.

Room LVII. Papyri. In the W. portion of the room are two noteworthy specimens found at Dêr el-Bahri in 1891: viz. 587, with an attractive portrait of Herub, priestess of Ammon, and representations of life beyond the tomb; and 588, belonging to Shed-su-hori, chief priest at Karnak.

In the N. part of the room : 590. Central portion of a large geographical treatise on the Fayûm, Lake Mœris, and its crocodile deity Sebek, written in a mystic style.
E. part: Specimens of the Book of the Dead.

Glass-Cases A-O: 595-610. Writing and painting tools, with materials of all kinds.

## g. Worship of the Dead and Fistorical Objects.

Room LVIII. Cabinets A-I: 611-634. Mummy-coverings, masks, and ornaments; including 630, 631. Mystic Uza-eyes of Ra , the right eye symbolizing the sun, the left eye the moon; 632,
633. Specimens of the so-called 'heart-scarabs', with magic formulx, found in the bodies of mummies whence the hearts had been removed; 634. Mummy belt.

Room LIX. Statuettes of very varied origin and date. - Cabinet B: *640. Rare example of an Egyptian landscape, with representations of several tombs of the shape usual under the New Empire, built on the edge of the fruitful belt in Egypt, with a sycamore (in front of which is a masked woman), two palms, and an altar with sacrificial offerings. - In the Stands $K$ and $L: 660$, 661. Two painted statues of Isis and Nephthys bewailing the dead Osiris (found at Dêr el-Bahri in 1891), of very rare occurrence in ancient Egypt (comp. Nos. 662, 663). - Glass-Case N: 667. Small tombstone in black granite and white limestone, representing the reunion of the body and the soul, the latter represented by a hawk with human head and arms. - Glass-Case P : 669-671. Cult of Isis and Hathor (Venus).

Room LX. Cabinet D: fourth row, Collection of tasteful statuettes (bearing the name of Amennuit-nakhtu).

Room LXI. Cabinet E: 678, 679. Fine Canopic vases of Oriental alabaster, dating from the Saïte period ; 680, 680b. Elegant boxes. - We retrace our steps through RR. LX and LXI to -

Room LXII. Papyri relating to the dead. 682. Papyrus with remarkably significant drawings, in a sketchy style. - W. side: 684. Papyrus $231 / 2 \mathrm{ft}$. in length, with caricature vignettes. - GlassCase R:686. Papyrus of Nesi-Khunsu, with beautiful cursive writing. - Glass-Case T: 687. Papyrus of Queen Makeri or Ramaka (No. 1192; p. 124), with delicate and vivid vignettes.

Room LXIII. 688. Pedestal' and feet of a statue of King Taharko (25th Dyn.), in green basalt, with representations of 14 couquered Asiatic tribes and 14 conquered African tribes; *689. Fine head of a king; 694. Blue porcelain sistrum, with the name of Darius (from Memphis); 698. Fine limestone statue of Seti I. as Ammon. - S.E. corner : 699. Grey granite pedestal, with an Ethiopian and a Syrian prince as captives (20th Dyn.). - Cabinet B:704. Bronze flgure of a queen in close-fitting garment and wig, from the Serapeum at Sakkâra; *711. Limestone head of an Asiatic captive; 715. Small flask in blue porcelain, for holding antimony powder used in darkening eyebrows; 718. Limestone stele of the hierodule Nebu- $a-u$, with symbols of the boundary between the two spheres of existence; 721. Splendid bronze lion with the name of King Apries, believed by H. Brugsch to be a huge padlock. - Cabinet C: 725. Fine limestone head of the Early Empire (Gìzeh); 726. Statue in green basalt, dating perhaps from the 16th Dynasty. - GlassCase G: 752. Fine lion's head in red jasper (18th Dyn.). - GlassCases $\mathbf{H}-\mathrm{J}$ and $L-O$ : Amulets and ornaments.

Room LXIV contains nothing of importance.

Room LXV. Cabinet B: 790. Sailing-boat, of the Middle Monarchy. -- Cabinets $E-G$ : Mummies of animals. - We return through RR. LXIV and LXIII, and proceed towards the E.

## h. Domestic Utensils and Clothing.

Rooms LXVI and LXVII contain nothing of importance.
Room LXVIII. Cabinet A: 834, 834b. Enamelled earthenware flasks, with New Year's wishes; cosmetic pots.

Room LXIX. Cabinets A-C: Linen clothes of Ament, priestess of Hathor (11th Dyn.; comp. No. 115) ; the delicate work on Nos. 843 and 843 b , in Cabinets B and D, should be observed. - GlassCases $H$ and $I$ : Shoes.

## i. Ornaments, Painted Portraits, Masks, ete.

Room LXX. Cabinet $A$ : Collection of mirrors. - Cabinet B: Musical instruments and children's toy (868. Dolls; 869. Jumping Jack).

Cabinet D contains a selection of Graco-Roman portraits, mostly painted in the encaustic style, and several stucco-masks, of which the second from the right is one of the best. The visitor should also notice the wooden house-altar, painted throughout, with the portrait of a boy (below him a stylus with paper and writing-tablet).

Cabinet E: 915, 915c. Mirrors; 919. Bronze sacrificial table.
Cabinet I: 940. Pincushion in the form of a tortoise (11th Dyn.); 941. Wooden fan, with holes in the centre for the feathers.

Room LXXI. Glass-Cases A-D : Scarabs from tombs. - GlassCase $G$ : Granite and cornelian scarabs, including one of large size with a human head. - Glass-Case H: 993. Scarab of opalescent glass. - Glass-Cases I and J: Historical scarabs, with cartouches of kings from the 4th Dyn. onwards; 994, 995. Scarabs with cartouches of mythical kings before Menes. - Glass-Cases $O$ and $P$ : Representations of kindred ideas: Transformation of the aged Horus into the youthful conqueror of monsters, sometimes identified with Bes-Hercules, as in No. 999, in which some authorities recognize the origin of the Greek legend of the labours of Hercules; 1000. Necklace of small sepulchral figures and amulets. - Glass-Cases $S-Y$ : Scarabs of various kinds, including one of green felspar (No. 1005).

## k. Worship of the Gods.

Room LXXII. In the centre, beside glass-cases $A$ and $H$ : 1006. Magnificent heart-shaped vase of dark granite, dedicated to the god Thoth by King Apries (26th Dyn.).

Glass-Case A: 1007. Bronze figure of Isis or Nephthys, of the Saïte period; fthen Ammon or Khnum, with the ram's head. -Glass-Case B: Cynocephali, cats, hawks, sows (sacred to Typhon), rams, etc. The elephant seems to have been sacred to no god, so
that No. 1009 is noteworthy. - Glass-Case C: Fine pectorals or ecclesiastical breast-ornaments; amulets against the evil eye.

Glass-Case D : Sceptres, the pattern of No. 1010 being the favourite ; most of them date from the Saïte period and were found at Zakâzîlk.

Glass-Cases $E-H$ : Amulets of vitreous paste, enamel, and obsidian, found on the site of the Labyrinth and other spots in the Fayûm. - To the E. of these cases -
1015. Four fine bronze statues of the lion-headed goddess Sekhet (Bast) and one of the hawk-headed Horus (the eyes were inserted), found at Saïs.

To the W. of Cases A-H : *1016. Thueris in the form of a hippopotamus, from Thebes (green serpentine). Thuëris was the guardian of the souls of the dead, and her terrible appearence served to scare away evil spirits. This specimen displays admirable technical workmanship.
N. part of the room: 1017-1020. Fine works in green basalt and serpentine, dating from the 30 th Dynasty.

Glass-Case I: Thoth and Anubis (with head of the ibis and jackal). - Glass-Case J: Ptah and Sekhet; Imhotep (the Egyptian Æsculapius).

Cabinet K. Upper division : 1021. Bronze head of Hathor emerging from a lotus-flower. - Second divisiou: 1023. Bronze shield, carried on a pole in processions.

Glass Case L: Bronzes of the Saïte period : 1024. Apis Bull, on a sledge, used for transporting it at great festivals; *1026. Nefer-tum, son of Sekhet, in bronze inlaid with gold and enamel; 1027. Anhuri, god of war; 1028. Nile-god Hapi; 1029. Apis, with human form and bull's head; 1030. Osiris Sahu (constellation of Orion). Nos. 1026-1030 were all found in the Serapeum at Sakkâra. 1031. Fighting Bes, of the Greek period (comp. No. 999).

Glass-Case M: 1032-1045. Bronzes (except 1033. Oxyrhynchosfish, sacred to Hathor, and 1039. Thuëris, comp. No. 1016): 1032. Neith; 1035. Selk, guardian of the viscera preserved in the Canopic vases; 1038, 1040. Khnum; 1042. Ma, goddess of Truth, with the ostrich-feather; 1043. Ammon-Ra; 1044. Muth; 1045. HathorNohemaït.

Glass-Case $N$ : 1061. Thuëris (comp. No. 1016), in serpentine; 1067. Silver vulture. All the other specimens (1046-1072) are bronzes, most of them found in the Serapeum at Sakkyâra and dating from the Saite period. 1047. Apis Bull on the sledge; 1048. Nilegod Hapi ; 1049. Horus and Thoth pouring the water of regeneration on a deceased man kneeling between them; 1050. Apis, with a Carian inscription on the base, in addition to the hieroglyphics; 1051. Imhotep (Æsculapius), son of Ptah; 1052. Hathor; 1053. Thoth as a cynocephalus; 1054. Fine statuette of Ammon; 1055. Osiris, Isis, Nephthys; 1056. Isis; 1057. Goddess Mehit or Hat Mehit; 1058. Hathor; 1059. Anubis ; 1060. Osiris (these two inlaid with gold);
1061. Thuëris; 1062. Horus; 1063. Ichneumon; 1064. Atef-diadem (headdress of the gods); 1065. Osiris group; 1066. Mentu, god of the burning sun and of victory. 1068. Osiris as a mummy between Isis and Horus; behind 0 siris is a sceptre in the form of a lotus, with a coiled snake. 1069. Sekhet with the sun-disk; 1070. Twoheaded god, a personiffcation of creative power; 1071. Bull's head; 1072. Jackal's head (Anubis); 1073. Selk-Isis, in white marble, protecting the Osiris-mummy; 1074. Bes-Hercules.

Cabinet P: Steles from the Apis-tombs at Sakkèra; beneath, 1078. Mourning for Apis. - Glass-Case Q: Statuettes of Osiris and Isis; Isis suckling Horus. - Glass-Case $R$ : 1090-1092. Bronze statuettes of Horus; 1093. Crocodile with hawk's head, in limestone. - GlassCase S: Osiris and Isis in bronze (1094), diorite, and electrum.

Cabinet T: Osiris, Horus (bronze), Ptah (blue enamelled earthenware). - Cabinet $U$ : Sekhet-Bast, in enamelled clay.-Cabinet $W$ : Bes. - Cabinet X: Thuëris (comp. No. 1016).

Cabinet Y: Statuettes of the gods above named, in bronze gilt. enamel, lapis-lazuli, and gold (1105. Ma), of the Saïte period.

Cabinet Z:1112. Vulture, sacred to Muth, the symbol of motherhood (in lapis-lazuli); 1113. Enamelled terracotta statuette of Min or Khem, god of generation, often united with Ammon (Greek period) : 1114. Child Khunsu with Ammon and Muth, the Theban triad (comp. Baedeker's Upper Egypt).

Cabinets $A A-A E$ : Small statuettes of Isis, Nephthys, and Horus; 1122 in chased opalescent glass, from the Saïte period. - Cabinet $A F$ : Small figures of a deformed dwarf, explained by Maspero as the symbol of the passage from death to the new life, also known as Ptah-Sokar (Sokar is the dead embalmed Osiris, Ptah the creative power awakening new life in the dead).

## 1. Botanical and Mineralogical Division.

Room LXXIII. This small room, to the N.E. of R. LXXII, contains specimens of ancient plants, flowers, fruit, and seeds, found in tombs. The flowers in the large glass-case on the $W$. side of the room were found at Dêr el-Bahri (comp. below), and have been prepared and named by Dr. G. Sichweinfurth.

Room LXXIV contains specimens of stone occurring in Egypt or in its monuments.

Room LXXV (Gallery) is used as a corridor and contains nothing but sarcophagi, of which some date from the 26th Dynasty. - The door to the right at the end of the gallery opens into R . LXXVII, on the other side of which (to the right) is R. LXXVI, in which the series of royal and priestly mummies begins.

## m. Mummies found at Dêr el-Bahri near Thebes in Upper Egypt.

The expulsion of the Hyksos was the achievement of the kings and the energetic priesthood of Thebes. The originally Ethiopian deity Am-
mon, whom they worshipped, was elevated by them to the dignity of Ammon-Ra, or king of the gods; and the glory of Thebes soon eclipsed the fame of the older centres of worship at Heliopolis, the shrine of Tum, and Memphis, the shrine of Ptah. The kings presented the treasures amassed in their successful campaigns to the temple of Ammon-Ra at Thebes, and the priests in retarn bestowed divine honours on the kings and celebrated their deeds on the temple-walls. Soon, however, the kings became suspicious of the power of the priests, and turned once more to the cults of Lower Egypt; this opposition finding its most distinct expression in the religious apostacy of Khu-en-Aten (Amenhotep IV.; comp. p. cviii), who favoured Asiatic forms of worship, and even ordered the name of Ammon to be deleted from the monuments at Thebes. But in the contest, the priests finally secured the upper hand, maintaining their position even during the brilliant period of the Ramessides (19th and 20th Dyn.), after whose fall they seized the throne for themselves, establishing an ecclesiastical monarchy in Upper Egypt that existed for a hundred years alongside of the secular kingdom of the Tanites in Lower Egypt. Finally, the Bubastide Sheshenk (p. cx) established himself as sole ruler in Thebes, and the priests of Ammon fled to Ethiopia, where they remained until their triumphant return with Piankhi.

The mammies of the priests and of the early kings were buried originally at Biban el-Mulak. It is exceedingly probable that before their flight to Ethiopia, the priests removed all these mummies to a safe place of concealment at Dêr el-Bahri, where they rested undisturbed for 27 centuries, only emerging to the light of day in our own time (see Baedeker's Opper Egypt). - The first snspicions of the existence of the royal tombs at Dêr el-Bahri date from 1871, but the Arabs of the neighbourhood carefully concealed their knowledge of them and long baffled the curiosity of travellers. Statuettes of Osiris, rolls of papyrus, and other objects offered for sale at Luxor gradually put investigators on the right scent, and finally in 1881 the source of these antiquities was discovered by BrugschBey, yielding a treasure that surpassed the most sanguine expectations. The mummies of the priests of Ammon were not discovered until 1891.

Rooms LXXVI-LXXXIII: Mummies of the Priests of Ammon.
Room LXXVI. The sarcophagi of this period usually consist of an outer and an inner case, both with lids, while the mummy within is encased farther in a third envelope of a kind of papiermaché, known as the 'cartonnage'. The present collection embraces more than 300 cases, lids, and cartonnages. The titles, 'divine Ammon-father' and 'Singer of Ammon', which are usually found applied to the male and female mummies respectively, indicate merely membership of the priestly caste, without any inference as to office or rank. The latter will be specially mentioned below. 1135. Cartonnage of Pameshon, chief priest of Ammon, with the painting of a ram's head emerging from a flower; 1136. Coffin of Khunsu-em-heb, scribe of the domains of Ammon (comp. p. 17).

Room LXXVII. 1137, 1138. Children's coffins; 1139. Coffin adapted for a child by the insertion of a partition; 1140. Coffin of the youthful Ankhesnisit; 1141. Coffin of the youthful Tanneferf.

Room LXXVIII. 1142. Sarcophagus of Nesinebtaui; 1143. Coffin of Duamenmat, with curious figures of gods and genii in the interior.

Room LXXIX. 1144. Coffin of Paduamen, a priest of high rank. 1145. Coffin of Dirpu; the linen garments found with this mummy are of remarkably fine material and workmanship; the flowers when
first found retained their natural bright colours, but have faded since exposed to te light. 1146. Sarcophagus of the 'Ammon-father' Ankhfenmaut, originally belonging to a certain Tamertira, whose name has been allowed to remain. 1147. Sarcophagus of another Ankhfenmaut, a scribe of the domain of Ammon and priest of Queen Aahhotep; on the lid of the inner coffin, Amenhotep I. appears as a god.

Room LXXX. 1149. Inner coffin-lid of Paifutaro, chief clerk in the office of the domains of Ammon; the divine honours paid to Amenhotep I. and the queens Ahmes Nefertari and Aah-hotep are mentioned here also. 1150. Inner coffin-lid of the Syrian Pakhali, also named Kha-nefer-amon, i.e., brave soldier of Ammon. Pakhali seems to have been ambassador of King Sheshenk at Thebes, so long as that monarch was friendly with the priests of Ammon, and he had attained a high priestly rank, which entitled him to penetrate to the third hall of the temple, known as the 'Heaven of Karnak'. The scenes on the sides of the coffins 1151 and 1151b should be observed. 1152. Coffin of a priest, who was entitled to penetrate to the sanctuary ( pp . clexiv, clexv).

Room LXXXI. 1153. Coffin, 1155. Cartonnage of two priests, initiated as managers into the secrets of the smelting-house of Ammon. - 1154. Coffin of the Ammon and Muth father Nespaneferhir, scribe of the boys of Neferu. These latter occupied a position resembling that of the Khenrit, who are supposed to have been the sacred prostitutes common in Asiatic cults. - 1156. Cartonnage of Meritamen, in which the curious arrangement of the hair and the unusual position of the hands, arms, and drapery should be noticed. $1157,1157 \mathrm{~b}$. Inner coffin-lids of No. 1156 and of the coffin of another 'singer of Ammon'; the outline of the body is plainly seen beneath the drapery, from which the bare feet project, as in the coffin of Isit (p. 125). 1158. Sarcophagus of Nesiamenap, one of the highest archpriests, who might enter the sanctuary along with the 'prophets'. 1159. Inner coffin of Tetmaausankh, with a remarkable representation of the sky; the scarab-headed god, who supports the sky, is watching the exchange of the life-fluid between heaven and earth.

Room LXXXII. The sarcophagi in this division exhibit a different kind of workmanship. The outer cases are white and rather more elaborately adorned; the inner cases are of a beautiful light yellow; and most of the cartonnages are also interesting. - 1160. Cartonnages of Paduamen, who bore ten of the most imposing titles, including that of 'first priest of Heliopolis', a titular rank ascribed in Thebes to the third priest of Ammon, in order to express the supremacy of Thebes over the cults of the North. 1161. Coffin of Mashasebekt (perhaps wife of the preceding), bearing five titles; 1162, 1165. Coffins of two 'Ammon-fathers', the latter of whom was also a priest of Khunsu; 1164. Cartonnage of Khunsu-en-renp, with four titles.

Room LXXXIII. Coffins belonging to Tanefer and his family, who seem to have been the owners of the place in which the mum-
mies were ooncealed (p. 121). These coffins were originally very gorgeously equipped, of which traces may still be discerned, in spite of the spoliation they have undergone (gilt faces and hands torn off, etc.). The style of decoration exhibits a considerable degree of art, and may be taken as charaoteristic of the style of the 21st Dynasty. - 1166. Sarcophagus of Tanefer, with ten titles (resembling No. 1160), among which is that of 'steward of the herds in the domain of the sun-god', recalling the Homeric 'cattle of Helios'. These cattle at Thebes stood under divine protection, and any injury done to them was visited with the heaviest punishment. 1167, 1167 b . Sarcophagus and cartonnage of Makeri (Ramaka); the former (like No. 1168) has retained its gilding; the latter (ereoted between the windows) shows unusually pale hands and face, the white colour being probably meant to be covered with gold. - 1168. Triple coffin (without cartonnage) of Hori, prophet of Ammon. 1169. Sarcophagus of Katseshni, lady-superior of the harem or of the nuns of Ammon-Ra; she was the daughter of the first prophet of Ammon Ra-men-kheper, the husband of Ast-em-kheb, now in the collection of royal mummies (No. 1238). 1170. Sarcophagus of Ra-menkheper, son of Tanefer, whom he succeeded as third prophet of Ammon. - 1171. Sarcophagus of Herub, second prophetess of Muth at Ashru (uear Bubastis) and Pames (the birth-house); she was the first Chief Superior of the harem of Ammon-Ra, and also a daughter of Ra-men-kheper and Ast-em-kheb (p. 107). This relationship is one of several proofs (comp. Nos. 1199, etc.) of the close connection between the mummies of the kings and of the priests of Ammon. - We now return to R. LXXX, and enter R. LXXXIV.

Room LXXXIV. Royal Mummirs and Objects found with them.
By the staircase in the large cruciform room are two huge coffins in the form of Osiris: 1172. Coffin of Queen Aah-hotep, wife of Amenhotep I. and mother of Aahmes I.; 1173. Coffln of Queen Nefer-tari, wife of Aahmes I.

Both these cases are formed of innumerable layers of linen cloth, tightly pressed and glued together and covered with a thin coating of stucco. The solid mass of linen thas prepared is at least as hard as wood, and is adorned with painted and incised ornaments and inscriptions. Each of the mummies wears a wig, surmounted by a crown and double feather.

In the middle of the room: 1174. Coffin of King Raskenen III. (end of the 17th Dyn.); 1176. Coffin of Siamen, a child of five or six years, eldest son of Aahmes I.; 1182. Mummy of Ramses III., the Rhampsinitos of the Greeks, who died about the age of seventy (found in the large coffin of Queen Nefer-tari); 1183. Coffin of King Pinozem 1., whose mummy was found in the large coffin of Queen Aah-hotep (No. 1172); 1184. Inner coffin of Queen Isitm'lheb (Ast-em-kheb), daughter of Masahirti (No. 1190) and mother of Pinozem II., with the mummy of Queen Nesi-Khunsu, wife of Pinozem II. 1185. Small white coffin of the Princess Sitamon, daughter of Aahmes I.
and Nefer-tari (No. 1173); the mummy was stolen in antiquity and replaced by a doll with a child's head. 1186. Coffn of Princess Mashonttimihu, with a false mummy decorated with garlands; 1187. Inner cofin-lid of Masahirti (comp. No. 1190); 1188. Coffin-lid of Tutmes III.; 1188b. Coffin-lid of Tutmes II. (comp. No. 1178); 1189. Double coffin with the mummy of Tet-ptah-anf-ankh, priest of Ammon; 1190. Coffin of Masahirti, high-priest of Ammon and commander-in-chief, son of Pinozem I., father of Queen Ast-emkheb (21st Dyn.) ; 1191. Outer coffin of Queen Ast-em-kheb (see Nos. 1184, 1238), containing at present the mummy of Princess Meritamen, sister of Amenhotep I.; 1192. Outer coffln of Queen Ramaka (Makeri, comp. No. 1198), containing at present the mummy of Queen Anhapu; 1193. Coffin and mummy of the priestly scribe Nebsenui (Nibsoni), in remarkably good preservation.
N. part of the room: 1194. Drawing by E. Brugsch-Bey and Vassali-Bey from the remains of a very artistically worked cata-falque-pall, now exhibited in four parts on the E. and W. walls (Nos. $1194 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$ ). - 1195. Coffin of Netem-mut (Notmit), mother of King Herhor (20th Dyn.), finely executed but in a very dilapidated condition; the hieroglyphics, and most of the ornamentation in gems and enamel inlaid in gold, were removed by Arabs, who also carried off the papyrus, a portion of which is now in the Louvre and another in the British Museum. - 1196. Coffln with the name of Princess Nesi-Khunsu, but apparently containing the mummy of King Ramses XII., one of the last of the Ramessides ( 20 th Dyn.); 1197. Coffin of Raï, nurse of Queen Nefer-tari, whose mummy, however, was replaced in antiquity by that of Queen Anhapu; 1198. Inner coffin with the mummies of Queen Ramaka (Makeri), who died in child-birth, and her infant daughter Mutemhat ; 1199. Coffin (originally painted and gilded but afterwards blackened with bitumen) of Nesi-t t-neb-asher, priestess of Ammon (22nd Dyn.). 1200. Mummyshaped coffin, without inscription; the young man whose body was found within, with the viscera unremoved and with embalmingmaterials only outwardly wrapped round him, is supposed to have been poisoned. - 1202. Coffin of Queen Hont-taui; 1203. Coffin of Tai-uhrit, 'singer of Ammon'.
W. side of the room: Cabinet A: Coffin-lid of Seti I. (comp. No. 1180) ; 1204. Coffin-lid of Queen Netem-mut (Notmit; comp. No. 1195). - Cabinet B: 1205. Pall of Masahirti (comp. No.1190); 1206. Reed-basket, with the wig of Ast-em-kheb (see No. 1238); 1207. Bronze stool, with four libation-vases; 1208. Casket of wood and ivory, with the name of Ramses IX.; 1209. Mirror-case of inlaid ivory; 1211. Small inlaid casket of Queen Hatshepstu; 1212. Small oars, found with the mummy of Tutmes III. (see No. 1179). -Glass-Case $C: 1216$. Coffin with the name of the priest and king Pinozem I., but the mummy is believed to be that of Tutmes I., to whom the coffin appears originally to have belonged.

The mummy was stripped by the Arabs. The well-preserved body is that of an old man with finely cut features, closely shorn head, and slight thin figure. The teeth are worn away like a horse's or like the teeth of the African tribes who live upon badly ground corn.
N.W.wall, near the window : 1217. Finely gilded coffin-lid of Ast-em-kheb. - Cabinet D: 1218-1220. Vases for sepulchral libations; 1221. Cloth of remarkable fineness from the coffln of Tutmes III. - Cabinet E: Coffin-lid of Tutmes I. (comp. No. 1216). - Cabinet F: Coffin-lid of Masahirti (comp. No. 1190). - Cabinet G: 12221224. Palls; 1225. Wooden tablet, with a fine hieratic inscription; 1226. Small coffin, used as a Canopic rase for a human liver; 1227. Full-dress wigs. - Cabinet $\boldsymbol{H}$ : Coffin-lid of Queen Makeri (Ramaka; comp. Nos. 1192, 1198). - Cabinet I: Coffin-lid of Nesi-Khunsu (comp. No. 1196).-Cabinet J: 1228-1232. Articles like the contents of $G$, including 1230. Mummy of a gazelle. - Cabinet $K$ : Outer coffln-lid of Nesitanebasher (comp. No. 1199); the inner-lid is placed against the wall beside the cabinet. - Cabinet L: Coffinlid of Amenhotep $I$.; the inscriptions are records of ancient examinations. - Cabinet M: 1237. Coffin of Ramses II.; *1238. Mummy of Ast-em-kheb (Isitm'kheb; comp. Nos. 1184, 1191, 1217), the finest in the entire collection; 1239. Coffin-lid of the preceding. Cabinet $N$ : Canopic vases, cases, and coffin-lids. - Cabinet $O$ : Coffinlid of Ramses Il. (comp. No. 1181). - The eight Glass-Cases P-W, in the centre of the room, contain a number of small sepulchral figures in blue enamelled terracotta. - Cabinet X: Amulets, pectorals, scarabs, and other articles in bronze gilt or enamelled terracotta found with the royal mummies. - The golden glove-fingers (No. 1245) were found on the hand of Masahirti (comp. No. 1190).

Rooms LXXXV and LXXXVI contain an Anthropological Collection, arranged by Dr. Fouquet, consisting mainly of mummies of priests of Ammon.

On the large landing in front of the room with the royal mummies: *1251. Gilded coffin-lid of Queen Aah-hotep (17th Dyn.; comp. Nos. 943 et seq.); the body is covered with Isis-wings, while the face appears to be a portrait of the queen.

Room LXXXVII contains Objects illustrating the Worship of the Dead, found elsewhere.
1252. Elegant gold-inlaid coffin of Horsi-Isit, first prophet of Horus, with mummy in the original undisturbed condition; 1253. Coffin of Isit, a relative of Sennot'em (comp. No. 467); 1254. Sepulchral sledge of Khunsu, found in the tomb of Sennot'em (see above), the type of the early-Egyptian funeral-carriage; 1256. Coffin and mummy of a girl named Tripi, with conquered evil spirits under the soles of her shoes, in admirable preservation and apparently dating from the last cent. B.C.; 1257. Tasteful white coffin of Sha-ui-amen-ams, priestess of Ammon; 1258. Coffin of Ameniritis; 1259. Funeral-sledge of Sennot'em (20th Dyn.).

In the corners of the room (S.W.): Terracotta mummy-cases, apparently of very late date; 1260. Fine cofflin of Sennot'em (see Nos. 1259, 467); 1261. Mummy of a woman fully clad, with a kind of cheerful gracefulness not often found under the circumstances (Greek period); 1263. Mummy of Pawu-wun-hor, an infantry officer of high rank; *1264, 1265. Portraits upon wood, from the injured mummies Nos. 335, 360,361 , found in the Fayûm (time of Marcus Aurelius); 1266. Mummy wrapping with portrait. - $1272,1273$. State-beds for the dead, frequently represented in paintings, but of rare occurrence in the original. The first dates from the 11th Dyn. (Thebes); the second from the Ptolemaic period, and is ornamented with pictorial scenes (Isis and Nephthys protecting the deceased with their wings; fourteen deities with the feather of truth, supporting the canopy of the bed). - $1274,1274 \mathrm{~b}$. Fine wooden sarcophagus, from the end of the Saite period; 1276. Small wooden naos, with the mummy of an ape. Also numerous coffins from the Saite and Ptolemaic periods, of less interest.

We now return and passing the coffin-lid of Aah-hotep (No.1251), descend the Staircase to the Groundfloor and enter Room LXXXVIII, which contains stone monuments.

Between the staircases: 1278. Pink granite sarcophagus of Queen Nitokris (26th Dyn.). - In the middle of the room: 1279. Broken coffin-lid of a ram, in black basalt; 1280. Grey granite sarcophagus, with the name of Psammetikh; 1281-1284. Marble sarcophagi of the Greek period; the last two were found in the cata combs of Alexandria.
W. Gallery: 1285. Sarcophagus of grey granite veined with pink, belonging to Ankh-hapi (Ptolemaic period); within is ágranite coffin shaped like a mummy. 1286. Sarcophagus of fine limestone, with the name of Terhor and coloured pictures and hieroglyphics (the lines to guide the workmen still visible), dating from the Greek period; 1287-1290. Large painted wooden coffin, with curved lid, from the Saïte period; 1291-1296. Six wooden sarcophagi, etc.
N. Gallery: 1298. Wooden sarcophagus-lid, with fine hieroglyphics (Saïte period); 1299, 1300. Two sarcophagi of grey granite, with numerous paintings and hieroglyphics both outside and inside (early P tolemaic period).
E. Gallery: 1302, 1302 b . Basalt sarcophagus of Horem-heb (30th Dyn.), a fine work of the period shortly before Alexander the Great, when Egypt under the Sebennytes (p. cxiv) attained a period of national prosperity; 1303. Sarcophagus-lid of limestone, with the representation of the close of the wanderings of the soul. - Several sarcophagi of the Ptolemaic period : 1304. Black granite sarcophagus; $1305,1306,1306 \mathrm{~b}$. (on the right side of the hall), Sarcophagi in grey basalt; 1307, 1307 b . Sarcophagus of fine, close-grained limestone; ${ }^{*}$ 1308. Green basalt sarcophagus of Betêta, with finely executed pictures and hieroglyphics. Sarcophagi in wood, limestone, and basalt, of inferior interest.



## 7. Outer Environs of Cairo to the North and East.


#### Abstract

As the obelisk at Heliopolis is the only one now standing in Lower Egypt on its original site, since the removal of Cleopatra's Needle (p. 21), it ought to be visited by travellers who do not intend to ascend the Nile. - The view from the Mokat!am Hills ranks with Karnak and Phile among the most beautiful sights in Egypt; and only very blase travellers will be content merely with the views from the Windmill Hill (p. 79) and the Citadel (p. 53). - The Fetrified Forest is, of course, especially interesting to geologists; but even ordinary travellers will find their account in an expedition to it, especially if they have not previously seen the desert.


## 1. Heliopolis.

This expedition is best made by Carriage (p. 30; drive to the obelisk $11 / 2 \mathrm{hr}$.), though it may also be accomplished by Railway, starting from the small station on the E. side of the Ismarilíyeh Canal (Pl. B, C, 1; p. 27). Trains run hourly from 8.30 a.m. to 8.30 p.m.

The High Road leads through the 'Abbâsîyeh (p. 93) and past Kubbeh and the Khedivial Palace (Palais Tewfik; p. 93). The plain between Kubbeh and Matarîyeh has been the scene of two important battles. In 1517 the Battle of Heliopolis made Selîm and the Turks masters of Egypt; and on 20th March, 1800, General Kleber with 10,000 French troops succeeded in defeating 60,000 Orientals, and in consequence of this victory regained possession of Cairo, although for a short time only. At a little distance to the right and, farther on, also to the left, numerous villas have been built within the last few years. The drive to Matarîyeh takes about $11 / 2 \mathrm{hr}$.

The Railway passes the following stations : $13 / 4$ M. Demirdâsh, station for the 「Abbâsîyeh (p. 93); 3 M. Kubri K Kubbeh; 31/2 M. Hammamât Kubbeh (baths); 41/4M. Serâi Kubbeh (viceregal palace, p. 93). - 6 M. Matariyeh, station for Heliopolis. (The railway goes on to El-Merg, p. 129.)

Near the insignificant village of Matariyeh are the Tree and Well of the Virgin and the Obelisk of Heliopolis. The Virgin's Tree (in a garden to the right of the road) is a sycamore with a decayed and riven trunk, covered with names and inscriptions, but the branches are still tolerably flourishing. According to the legend, the Virgin and Child once rested under the shade of this tree during the Flight into Egypt; and there is another tradition to the effect that the persecuted Mary concealed herself with the Child in a hollow of the trunk, and that a spider so completely covered the opening with its web as to screen her effectually from observation. The present tree, the predecessor of which died in 1665 , was not planted till after 1672 ; it is now protected by a railing. The garden is watered by means of a double sâkiyeh, which is supplied from a shallow reservoir fed by springs. This water is good for drinking, while that of all the others, which percolates through the ground from the Nile, is usually brackish. This reservoir has been called the 'Water of An' from a very early period, and flgures in the Coptic legends connected with the Virgin. It is an interesting fact that
the celebrated balsam shrub, the balm of which is said to have been presented to Solomon by the Queen of Sheba, once throve in this neighbourhood. The plant, however, does not now occur nearer than Yemen, where its juice is an article of commerce. It is said to have been replanted here by Cleopatra, but apparently without success.

About $1 / 2 \mathrm{M}$. beyond the garden are situated the ruins of the famous ancient Heliopolis, or city of the sun, of which the obelisk and the outer walls are now the only vestiges. The town was called by the Egyptians the dwelling or seat of Ra (Helios), or of Tum (the evening sun, p. cl), or house of Phœnix (Bennu) or An. The latter, the popular name of the place, is frequently mentioned in the Bible under the Hebrew form of $O n$. Thus, in Genesis (xli, 45), we are informed that Pharaoh gave Joseph 'to wife Asenath, the daughter of Potipherah (i.e. 'dedicated to Ra'), priest of On'.

From a very early period the Sun Temple of Ra (Tum-Harmachis, p. cxlix), the most famous and ancient shrine in Egypt, with the exception of that of Ptah of Memphis, was the scene of magnificent rites in honour of the cycle of deities connected with the worship of the sun. The chief of these were Tum and Ra-Harmachis, with his companion Thoth. With regard to the Phoenix, the bird of Ra, which was worshipped here, and which brings its ashes to Heliopolis, see p. cxlix. The fonndation of the temple is of very remote origin. In the 'great hall' here the wonnds of Horus, received in his combat with Seth Typhon (p. clii), are said to have been healed. Amenemha $I$, the first king of the 12 th Dynasty, restored the shrine of Tum and laid the foundation of the Sun Temple, in front of which his son and successor Usertesen I. erected the obelisk which still stands here. As each Pharaoh was regarded as a human embodiment of Ra, it was natural that he should present special offerings to the chief scene of the worship of that god, and should proudly add to his titles that of 'lord of Heliopolis'. The immense wealth of this shrine is mentioned by various papyri, and particularly the Harris papyrus in London, which gives a list of the gifts presented to it by Ramses III. alone. The staff of priests, officials, custodians, and menials connected with the temple is said to have numbered no less than 12,913 . The most celebrated of the ancient schools, with the teachers of which Herodotns once conversed, was also established at Heliopolis, while in Strabo's time (born B.C. 60) the famous seat of learning had ceased to exist, although the houses of the priestly scholars were still standing. - Obelisks, the emblems of the sun's rays, were of course frequently dedicated to the god of the sun and his temple; and we are accordingly informed that Heliopolis was 'full of obelisks'.

The *Obblisk which still stands here is of red granite of Syene (Assuân), and is 66 ft . high; but the ground on which it stands has been so raised by deposits of mud, that a great part of the obelisk is now buried. Excepting a small obelisk found by Lepsius in the Necropolis of Memphis, this is the oldest yet discovered. Each of the four sides bears the same inscription in the bold and simple characters of the old empire; that on the N. side, the only one entirely legible, records that Usertesen I. (Ra-kheper-ka), King of Upper and Lower Egypt, lord of the diadems and son of the sun, whom the (divine) spirits of An (Heliopolis) love, etc., founded the obelisk on the first day of the festival of Set, celebrated at the close
of a period of thirty years (middle of the 3 rd cent. B.C.). The inscriptions on the other three sides have been rendered illegible by the bees which have made their cells in the deeply cuthieroglyphics. Part of the surface of the W. side has also peeled off, and there are a few cracks on the S. side. The pyramidium at the top was covered with metal at a comparatively late period. Cambyses is erroneously said to have destroyed Heliopolis, but it is ascertained that the city still contained many objects of interest down to a late Mohammedan period. The companion obelisk (for these monuments were always erected in pairs) stood, as Mohammedan writers inform us, down to the 12 th century.

The excursion may be extended to the village of El-Mer•g ( $21 / 2 \mathrm{M}$.; rail-way-station, see p. 127), with some ruins of the 18 th Dynasty, and the once prosperous, but now ruinous Khankah, on the outskirts of the desert ( $21 / 2 \mathrm{hrs}$. from Mataríyeh), but the sole attraction consists in the duck and snipe shooting around the ponds near Khânkâh. An interesting visit may, however, be made without much trouble to an ostrich farm kept by some Frenchmen, about $1 / 4 \mathrm{hr}$. to the E. of Matarîyeh, with about 800 birds (adm. 8 pias.).

The Birket el-Hagg, or Lake of the Pilgrims, $41 / 2 \mathrm{M}$. to the E. of Mataríyeh, presents no attraction except during the latter half of the lunar month of Shawwâl, when the great caravan which accompanies the new kisweh, or cover for the Ka'ba, to Mecca, assembles here to celebrate the so-called Mahmal Festival (p. cii). A similar scene may, however, be more conveniently viewed at the 'Abbâsîyeh, where festivities take place at the time of the departure and arrival of the sacred carpet.

## 2. The Mokattam Hills.

An excursion to the Mokattam Hills is best made on Donkey-back (p. 30). Including the return, it takes about 3 hrs ., but it may be combined with the visit to the Petrified Forest in the manner indicated at p. 132. The Fieso is best at sunset, or in the morning between 8 and 9 o'clock.

The best route to the Mokattam starts from the Citadel, whence it ascends almost straight, passing through the $\operatorname{Bâb}$ el-Gebel (Pl. F, 6) and over the railway-bridge. - The route starting from the Tombs of the Khalîfs should be avoided on account of the intolerable dust. About $3 / 4 \mathrm{hr}$. brings us to the top.

The *Mokattam Hills (or Gebel Giyûshi, as the range of hills to the E. of Cairo is sometimes called after the conspicuous old mosque situated on the summit) belong to the great range of the nummulite mountains which extend from N.W. Africa, across Egypt and India, to China. This nummulite formation is one of the Eocene, or oldest deposits of the tertiary period, and immediately follows the chalk. It affords a favourite building-stone, and there are numerous quarries on the slopes of the hills.

The nummulite is remarkably rich in fossils, the chief mass of which consists of millions of nummulits (a kind of snail-shell), or large rhizopodes of the polythalamia group. The larger kinds are about one inch in diameter, and the smaller about $1 / 8$ inch. On removing the outer coating of limestone, we find the well-defined chambers within. They are also frequently seen, cut into two halves, in the stones of the Pyramids, which are to a great extent constructed of nummulite limestone. The Greeks also noticed these curious fossils, and Herodotus mentions the smallest kinds as being petrified lentils, of the sort eaten by the ancient Egyptians (comp. 139).

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The numerous quarries in the slopes of the Mokattam and the higher side-valleys of the range also yield a profusion of sea-urchins (clypeaster, cidaris, echinolampas, etc.), various kinds of oysters, cerithium, ovula, strombus, nerina, furritella, nautilus, bivalves, sharks' teeth, and bones of the halicore. Beautiful crystals of isinglass-stone and of strontian also occur.

The *Visw from the top, especially with its sunset colouring, is magnificent. The thousand minarets of the city and the picturesque buildings of the Citadel are then tinted with a delicate rosy hue. The grandest of all the burial-grounds of the desert forms a noble foreground, the venerable Nile dotted with its lateen sails flows below us in its quiet majesty, and to the W., on the borders of the immeasurable desert, tower the huge and wondrous old Pyramids, gilded and reddened by the setting sun. At our feet are the Citadel with the mosque of Mohammed 'Ali, the old aqueduct on the left, and the domes of Imâm Shâféi (p. 80). A still more varied view is commanded by a steep projection to the $S$. of the old mosque of Giyûshi, the foreground being especially picturesque, while the horizon to the $S$. seems more open and tempts our fancy to visit the wonders of Upper Egypt.

At the N. end of the plateau is an old Turkish fort, whence a bridge descends to the Citadel. On the N.E. and higher part of the Mokatṭam, separated from the Citadel by a large quarry, is a memorial stone, to the right, adjoining the summit, erected in 1874 by the British party of scientific men who observed the transit of Venus from this point. The projecting rock in front of this point commands the most extensive panorama in the neighbourhood of Cairo, and should certainly be visited if time permit. The S. (right) end of these hills is skirted by the road to the smaller Petrified Forest, which may be reached from this point in about 1 hour.

The route back to the town skirts the Citadel on the $S$. and leads viâ the Bâb el-Karâfeh and the Place Méhémet-Ali (p. 53; view from below of the mosque of Mohammed 'Ali).

## 3. Spring of Moses and the Petrified Forest.

To the natives the Petrified Forest is known as the 'Great' and the 'Litlle' Gebel Khashab. The scientific traveller will find a visit to the former extremely interesting, but most travellers will be satisfied with an excursion to the latter, the outskirts of which may be reached in $11 / 2-2 \mathrm{hrs}$. The expedition may be made in half-a-day on donkey-back. Carriages require extra horses, and even then sometimes stick in the sand. - The deviation to the so-called Spring of Moses adds rather less than an hour to the expedition.

The services of a guide should be secured, for the donkey-boys are not usually familiar with the route to the Little Petrified Forest. A visit to the 'Great', near the Bîr el-Fahmeh, can hardly be accomplished without the aid of a well-informed dragoman.

Leaving the Bâb en-Nașr (p. 72), we turn to the right to the Tombs of the Khalîfs, pass between the Mokatṭam (p. 129) and the 'Red Mountain' (p. 93), and ascend to a desert valley, into which the E. spurs of the Mokattam descend. After a ride of $1 / 4 \mathrm{hr}$., dur-
ing which an isolated hill of red and black sandstone resembling the 'Red Mountain' is visible in the desert on our left, we cross a deep, dry water-course. The path divides here. That to the right leads to the Spring of Moses and the Little Petrified Forest (see below), while that to the left is the route to the Great Petrified Forest and the Bîr el-Faḥmeh (p. 132).

Following the path to the right, we observe a yellowish hill at the foot of the spurs of the Mokattam, and reach it in $1 / 4 \mathrm{hr}$. more. This hill stands at the mouth of the narrow, winding valley, $11 / 4 \mathrm{M}$. in length, through which the path to the Spring of Moses ascends over large blocks of stone and rubble. The ravine terminates in a lofty amphitheatre of rock, which affords wlcome shade. Near its stands a fig-tree, which the quarrymen haveeenclosed with a wall to protect it from the wind. In the higher angle of the valley to the right is the cleft in the rock from which trickle a few drops of bitter and brackish water, quite arbitrarily named the Spring of Moses ("Ain Müsa). The chief attraction of the gorge consists in the numerous desert plants and the fossils it contains.

In order to reach the smaller Petrified Forest, we return to the mouth of the gorge at the foot of the hill above mentioned, turn to the right, and proceed towards the S., skirting the slopes of the Mokattam, which are here more precipitous. We then cross a black projecting rock, which has a glazed appearance, and pass through a square gap in the rock, beyond which we observe opposite to us gently sloping hills, consisting of limestone, marl, and beds of fossil oysters. The route ascends, a little to the right, between these hills, and soon reaches the plateau of the Gebel el-Khashab, where the scattered fragments of fossil wood indicate the beginning of the Little Petrified Forest. The farther S. we proceed across this plateau, the more numerous do the fossil trunks become; but they are inferior in length and thickness to those on the Bîr el-Fahmeh (p. 132). Almost all these trunks and fragments have been ascertained by Unger to belong to the same tree, which he has named the Nicolia Egyptiaca. On examining the grain microscopically, he found that it did not belong to the palm family, but was more akin to the cotton-plant. The trunks show traces of ramification, but do not now possess either roots or boughs. Whether the trees once grew here, or were floated hither by water, became embedded in the sand, and afterwards converted into stone, is still a matter of controversy. Fraas is of opinion that the formation resembles that of brown coal of the miocene period, but that the trunks, instead of becoming carbonised, were converted into flint owing to the abundant presence of silica in the sandstone and to the peculiarity of the climate, which appears to have been much the same at that remote period as at the present day.

Crossing the plateau of the Petrified Forest for about 20 min . more towards the S., we suddenly reach the S. slopes of the Mo-
kattam, through a gap in which a path descends into the Wâdi etTih, or 'valley of wanderings' (more correctly Wâdi Dughla). On the S. horizon rise the hills of Ṭurra (p. 190), recognisable by the old fortress on their right spur and by two heights exactly opposite to us, of which that to the left somewhat resembles a coffin in shape, while that to the right is of semicircular form. Crossing the bottom of the valley in this direction (S.), we perceive in the Turra hills the entrance to a desert gorge, bounded by lofty and precipitous slopes. This valley extends for many miles in various windings, communicates with the ravines of the desert which begin in the Gebel Hoff near Helwàn, and is abundantly stocked with the plants peculiar to the desert.

We may return to Cairo from the Little Petrified Forest through the 'Valley of Wanderings', skirting the S. and W. slopes of the Mokattam, and passing the Tombs of the Mamelukes. Another interesting return-route leads across the Mokattamhills. If we choose the latter we quit the Petrified Forest by a hollow to the S.W., and ascend over ridges to a plateau, stretching towards the W., and bounded on either hand by hills. We hold somewhat to the right, and soon reach a road, which finally passes through a rocky ravine near the Giyûshi eninence (p. 129), the view from which (p. 130) forms all admirable close to the day's excursion. Thence to the city, see p. 130.

A visit to the Great Petrified Forest near Bír el-Fahmeh (4 his. to the E. of Cairo, and $21 / 2 \mathrm{hrs}$. beyond the Little Petrified Forest) takes a whole day, and is fatiguing, especially as the traveller has the sun in his face both in going and returning; but it is interesting to geologists, ur as an example of a 'desert journey'. The route mentioned on p. 131 is not recommended for the outward journey, as the point for which we are bound, not being conspicuous, is likely to be missed. It is better to leave Cairo by the Bá') el-Karafeh (Pl. G, 2), pass the Tombs of the Mamelukes ( $\mathbf{p} .80$ ) and the branch-railway to Helwân, and, leaving the village of Basatin on the right, ascend to the left by the Jewish Cemetery. After reaching the top of the hill in the Wadi et-Tîh (see above), we follow the valley towards the $E$. for $11 / 4-11 / 2 \mathrm{hr}$. more. Above the gradual slopes of the desert, about $1 / 4 \mathrm{M}$. to the left, we then perceive several reddish hills and another of yellowish colour in front. Riding towards the latter, we reach on its E. slopes the debris of the Bir el-Fahmeh ('coal well') and remains of some walls, dating from the period (1840) when an unsuccessful search for coal was made here. The hills of the desert to the N., N.W., and W. of the Bir el-Fahmeh form the Great Petrified Forest, and are thickly strewn with trunks and fragments of fossil timber. Some of the trunks which are exposed to view measure $65-100 \mathrm{ft}$. in length, and are upwards of 3 ft . thick at the lower end. They are generally brown and black, with a polished appearance, and frequently contain chalcedony. A sand-hill, $1 / 2$ hr. to the N. of Bir el-Fahmeh, to the base of which the Forest extends, affords a good survey of the district. To the N.W. are the Mokattam, the 'Red Mountain' (p. 93), the 'Abbâsîyeh, and the plain of the Nile. - We may return in this direction, keeping to the N. of the Mokattam hills, following a level desert valley.



## 8. The Pyramids of Gizeh,

The Excursion to the Prramids of Gîzeh requires half-a-day (carr., see $p .30$ ); the drive there and back takes $1-11 / 4 \mathrm{br}$. each way, and a stay of 4 hrs. is included in the tariff-charge. Some travellers prefer the Mail Coach of the Mena House Hotel (see below), which leaves Cook's Office, near Shepheard's Hotel in Cairo, daily at 11.45 a.m., returning from the Mena House Hotel at $4.30 \mathrm{p} . \mathrm{m}$. (return fare 5 s., box seat 2 s .6 d . extra). After very wet weather; which makes the road slippery, the coach sometimes does not run. Those who do notintend to lunch at the Mena House (B. 8 , luncheon 20, D. 30 pias.; large parties should telephone in advance) should bring provisions with them from their hotel (included in the pension-charge). The drive in open carriages along the long and shady lebbek-avenues is sometimes rather cool, so that delicate travellers should take measures accordingly. - One of the fine and calm days of which there is no lack at Cairo should be selected for the excursion, the driving sand in windy weather being very unpleasant. Sun-Umbrellas and Smoked Spectacles are necessary precautions agaitst the glare of the sun, especially on the top of the Great Pyramid. A Magnesium Lamp (p. xv) and Candles will also be required if the traveller visits the interior of any of the pyramids. Ladies who intend to ascend the pyramids should dress accordingly, and they will find a Foot-stool of great assistance in negotiating the high steps.

Chief Atrractions. Those who are pressed for time should devote their attention to the rareat Pyramid (p. 144 ; ascend to the snmmit), the **Sphinx (p. 151), the *Granite Temple (p. 154), "Campbell's Tomb (p. 156), and the Tomb of Numbers (p. 155). The inspection of these chief objects of interest occupies about 2 hrs. The "Circuil described at p. 156 will occupy $11 / 2-2 \mathrm{hrs}$. more. Most of the tombs (p. 156) are so badly preserved that they are not worth visiting, unless the traveller is unable to undertake the excursion to Sakkâra.

The road to the pyramids as far as the Museum of Gizeh has been described at p. 94. It there quits the Nile and runs inland, skirting the park of the palace. The village of Gizeh (p.94) and the station of the same name on the Upper Egyptian railway lie to the left. The road makes a curve, crosses the railway, and then leads straight towards the pyramids, which are still nearly 5 M . distant. On the left lie the huts of two fellâḥ̂in villages, Et-Ṭalbîyeh and ElKôm el-Aswad. The fields on each side are intersected by canals and cuttings, containing more or less water according to the season. Small white herons, erroneously supposed to be the ibis, and vultures with light and dark plumage are frequently observed here. The huge angular forms of the Pyramids now loom through the morning mist, and soon stand out in clear outlines, with all the injuries they have sustained during the lapse of thousands of years.

A few hundred yards before the road begins to ascend, it is protected against the encroachments of the sand by a wall 5 ft . in lieight. On the right are the extensive buildings of the *MenaHouse Hotel ( p .28 ), erected in 1888-89. 'The road, 26 ft . in width, winds up the slope to the left, and reaches the platean 130 yds. from the N. W. corner of the Pyramid of Oheops. Near the N.E. angle of the Pyramid is a Viceroyal Kiosque (Pl. a).

The 'Beduins of Gîzeh', who surround the carriage and importune travellers long before the Pyramids are reached, are very pertinacious in their attentions and exorbitant in their demands. No attention should e
paid to their demonstrations at first, but one of them may be afterwards engaged for the ascent of the Great Pyramid and a visit to the other antiquities.

For the ascent of the Great Pyramid a single traveller usually takes two guides, but three suffice for two travellers. For a visit to the interior (not recommended) each traveller is accompanied by one guide. The customary fee for the whole expedition, payable to the Shêkh of the Beduins, is 12 pias. for each traveller, whether he has been attended by one, two, or three gaides. The Beduins are never contented with this sum, but the remuneration is ample. The traveller, however, if not dissatisfied, may give an additional gratuity of $1-2$ pias. to each of his guides. On no account should any payment be made to any of them until the termination of the expedition. One guide of course suffices for a visit to the other objects of interest, the fee for which is $4-6$ pias. according to the time occupied. With the aid of the annexed plan the traveller might indeed easily dispense with their services, but as they seem to regard the privilege of escorting $t r_{a}$ vellers as a kind of birthright, he had better engage one of them for the sake of avoiding farther importunities. Both in going and returning as we 11 as on the top the traveller is importuned for bakshish not only by his own assistants, but also by various other bystanders; no notice should be taken of all these attempts. At the summit of the Pyramid the patience is again sorely tried by the onslaught of dishonest money-changers and vendors of spurious antiquities (the fossil star-fish or clypeasters offered here are said to be found in a miocene deposit, $21 / 4 \mathrm{M}$. to the S . of the Sphina). All parley with these characters should be avoided, but the traveller should remember that patient equanimity is his best safeguard.

The **Pyramids of Gizeh form one of five groups of pyramids within the precincts of the Necropolis of the ancient capital city of Memphis (p. 160) which stand on the margin of the plateau of the Libyan desert, along a line about 20 M . in length. Southwards follow the groups of $\mathbf{Z}$ âwyet el-‘Aryân and Abusîr-(p.158), Sakkâra (p.164), and Dahshûr (p. 187). The fifth group, that of $A \ddot{b} \dot{u}$ Roâsh, lies nearly 5 M . to the N . of the Pyramids of Gîzeh, but it is almost entirely destroyed and possesses no interest. $\dagger$

History of the Pyramids. The Pyramids are the oldest and most wonderful monuments of human industry yet discovered. The name, according to some authorities, is derived from the Egyptian Pi-Rama ('the mountain'), and according to others from $\pi u p o ́ s$, wheat, and
 Pyramid, which was surnamed that 'of Cochome' (comp. p. 164), to the fourth king of the 1st Thinite Dynasty ( $\mathrm{p} . \mathrm{c} \mathbf{v}$ ), but the statement is very improbable. The first Egyptian monuments which bear the names of their founders date from the time of Snefru, who formed a link between the 3rd and 4th Dynasties. That monarch was the immediate predecessor of Khufu (or Cheops, B.C. 3091-67), Khâfrâ (or Chephren, 3067-43), and Menkaurâ (or Mycerinus, 3043-20), the builders of the Great Pyramids (comp. pp. cr, 135-138). It continued customary to build pyramids down to the 12th Dynasty (B.C.2300);

[^29]but at a later period, especially after the residence of the Pharaohs had been removed from Mémphis to Thebes, the kings, as well as their subjects, seem to have preferred rock-tombs to mausolea above ground. The Greeks were much struck by these monuments when they first came to Egypt, and the Pyramids are therefore invariably described by Greek travellers ${ }^{t}$, as well as by their Roman successors, as among the greatest wonders of the world.

Herodotus, who visited Egypt about 470-460 B.C., though ill informed as to the history of the founders of the Pyramids, describes the structures themselves admirably, like everything else he saw in person. Cheops (Khufu), according to his statement, was addicted to every kind of vice; he closed the temples, prohibited the offering of sacrifices, and oppressed the whole nation by exacting compulsory labour. Some of his subjects were employed by him in quarrying blocks of stone among the Arabian mountains, and in transporting them to the Nile, others had to ferry these stones across the river, while others again conveyed them to the base of the Libyan mountains. 'Now there were about 100,000 men employed annually for three months in each of these tasks. They took ten years to make the road for the transport of the stones, which, in my opinion, must have been almost as laborious a task as the building of the Pyramid itself; for the length of the road amounts to five stadia ( 1017 yds .), its breadth is ten fathoms ( 60 ft. ), and its height, at the highest places, is eight fathoms ( 48 ft. ), and it is constructed entirely of polished stone with figures engraved on ittt. Ten years were thus consumed in making this road and the subterranean chambers on the hill occupied by the Pyramids, which the king caused to be excavated as his burialplace, having made it an island by conducting a canal thither from the Nile. (As to this erroneous statement, see p. 148.) Now the construction of the Pyramid occupied twenty years $\mathrm{tt+}$. Each of the sides, which face the different points of the compass, for there are four sides, measures eight plethra ( 820 ft .), and the height is the same. It is covered with polished stones, well jointed, none of which is less than thirty feet long.'
'This pyramid was first built in the form of a flight of steps. After the workmen had completed the pyramid in this form, they

[^30]raised the other stones (used for the incristation) by means of machines, made of short beams, from the ground to the first tier of steps; and after the stone was placed there it was raised to the second tier by another machine; for there were as many machines as there were tiers of steps; or perhaps the same machine, if it was easily moved, was raised from one tier to the other, as it was required for lifting the stones. The highest part of the pyramid was thus finished first, the parts adjoining it were taken next, and the lowest part, next to the earth, was completed last. It was recorded on the pyramid, in Egyptian writing, how many rädishes, onions, and roots of garlic had been distributed among the workmen, and if I rightly remember what the interpreter ( p . xxi) who read the writing told met, the money they cost amounted to sixteen hundred talents of silver (upwards of $350,000 \ell$.). If this was really the case, how much more must then have been spent on the iron with which they worked, and on the food and clothing of the workmen, seeing that they worked for the time already mentioned, and I believe that no shorter time could have been occupied with quarrying and transporting the stones, and with the work and the excavations under the surface of the earth.'
'Cheops is said to have reigned fifty years in Egypt, and to have been succeeded in the kingdom by his brother Chephren, who acted exactly in the same manner as his brother, and who also erected a pyramid, which, however, is not of so great dimensions (for we measured this one also). This pyramid does not contain subterranean chambers, nor is a channel conducted to it from the Nile (comp. p. 148). Chephren constructed the foundations of coloured Ethiopian stone (granite of Assuân), but the pyramid was forty feet lower than the other, near which he erected it; for both stand on the same hill, at a height of about a hundred feet. Chephren is said to have reigned fifty-six years.'
'This makes altogether a hundred and six years, during which the Egyptians suffered all kinds of oppression, and the temples constantly remained closed. Owing to their hatred of these two kings, the people would not even mention their names, and they even call the pyramids after a shepherd named Philitis, who at that period pastured his flocks in the neighbourhood $t t^{\prime}$.
'After this king (Chephren), Mycerinus, the son of Cheops, is said to have reigned over Egypt. He is said to have had no pleasure

[^31]in the conduct of his father, but to have re-opened the temples and to have allowed the people, reduced to extreme distress, to return to their occupations and the worship of the gods. He is also said to have pronounced the most just judgments of all the kings.'
'He, too, left behind him a pyramid, but a much smaller one than that built by his father. Each of its sides measures 280 feet only, and half of it consists of Ethiopian stone. Some of the Greeks state that this was the pyramid of Rhodopis, a courtezan; but they are wrong; nay, when they maintain this, they do not seem to me even to know who this Rhodopis was, for she flourished in the time of King Amasis, and not in the reign of this king (comp. p. 139).'

The account given by Diodorus Siculus (i. 63, 64) is as follows: - 'The eighth king was Chembes, the Memphite, who reigned fifty years. He built the largest of the three pyramids, which were reckoned among the seven wonders of the world. They are to be found in the direction of Libya, 120 stadia distant from Memphis, and 45 from the Nile. The sight of these great masses and their artistic construction excites surprise and admiration. The base of the largest, the plan of which is quadrilateral, is seven plethra ( 700 ft .) on each side; and the height is more than six plethra. The sides gradually contract towards the top, where each is still six cubits broad. The whole building is of hard stone, difficult to hew, and it is of everlasting duration. For no less than a thousand (some writers even say three thousand) years are said to have elapsed from the building of the pyramids down to the present time; and yet these stones, in their original jointing, and the whole structure are preserved uninjured by time. The stones are said to have been brought all the way from Arabia, and the building to have beell erected by means of embankments, as no lifting machines had yet been invented. And the most wonderful thing is, that, around the place where this enormous work is built, nothing is to be found but sandy soil, and there is no trace either of the embankment or of the hewing of the stones; so that one might believe that the whole mass had not been gradually erected by human hands, but had been placed by some god in this sandy plain in a finished condition. The Egyptians attempt partly to explain this by the miraculous story that the embankments consisted of salt and saltpetre, and that they were melted by an inundation; that they thus disappeared, while the solid building remained. But this was not really the case; it was more probably the same number of human hands employed in throwing up the embankments that removed them and cleared the ground. It is said that 360,000 men were compulsorily employed in the work, and that the whole was scarcely completed within a period of twenty years ${ }^{4}$.'

[^32]'On the death of this king, his brother Chephren succeeded to the throne. He reigned fifty-six years. According to others the successor was not a brother of the last king, but a sou of his, named Chabryis. In this, however, all the accounts agree, that, imitating his predecessor, he erected the second pyramid, which is indeed as artistically built as the first, but is not nearly so large, each side of the area being a stadium only ( 193 yds.). . . The kings had built these pyramids as tombs, and yet neither of them is buried in them. For they were so hated on account of the excessively laborious work imposed by them and their many cruelties and oppressions, that the people threatened to drag their bodies from their tombs with derision and to tear them to pieces. Both, therefore, commanded their relatives, before their deaths, to bury them quietly in some unknown place.'
'These kings were succeeded by Mycerinus (whom some call Mencherinus), a son of the builder of the first pyramid. He resolved to erect a third pyramid, but died before the work was finished. Each side of the area he made 300 feet long. He caused the sides to be constructed, up to the fifteenth tier, of black stone, resembling the Theban. For the completion of the remaining part he employed the kind of stone which had been used for the other pyramids. Although this work is inferior to the others in point of size, it is superior in its much more artistic construction and its valuable stone. The name of Mycerinus, the builder of the pyramid, is inscribed on its N . side.'
'This king is said to have abhorred the cruelty of his predecessors, and to have endeavoured to be courteous to every one and to become the benefactor of his subjects. He is said to have sought in every possible way to gain the affection of his subjects, and among other things to have presented large sums at the public courts of law to honest people who were thought to have lost their causes undeservedly. There are three other pyramids, the sides of which are 200 feet long. In their whole construction they resemble the others, but not in size. The three kings already named are said to have erected them for their wives. These works are unquestionably the most remarkable in all Egypt, whether in respect of the size of the buildings and their cost, or the skill of the artists. And it is thought that the architects deserve even more admiration than the kings who defrayed the cost; for the former contributed to the completion of the work by mental power and praiseworthy exertion, but the latter only by the wealth they had inherited and the labour of others. Neither the natives, however, nor the historians at all agree in their accounts of the pyramids. For some maintain that they were built by these three kings, and others that they were built by different persons'.

Strabo's account is remarkably graphic and concise: - 'If you go forty stadia from the city (of Memphis), you come to a hill on
which stand many pyramids, the burial-places of kings. Three are particularly remarkable, and two of these are even reckoned among the seven wonders. They are square in form and a stadium in height, and this height is only slightly greater than the length of each side. One pyramid, too, is a little larger than the other. A moderate distance up one of its sides, this pyramid has a stone which can be takeu out. When it is removed, an oblique passage within leads to the tomb. These pyramids are near each other in the same open space; and a little higher up the hill is the third, much smaller than these two, but erected in a much more costly style. For, from its foundation nearly up to the middle, it consists of a black stone, of which mortars are also made, and which is brought from a long distance, namely from the mountains of Ethiopia. Owing to its hardness and the difficulty of working it, the building is rendered expensive'.

Strabo then speaks of the fossils resembling lentils, mentioned at p. 129, but does not share the view current at that period that they were the petrified remains of the workmen's food. With regard to Rhodopis, who is mentioned at p. 137, he tells the following tradition, resembling the tale of the modern Cinderella. While Rhodopis was bathing, an eagle carried off one of her shoes, carried it to Memphis, and dropped it into the lap of the king, who was then sitting on the judgment seat. The king, admiring the daintiness of the shoe, and surprised at the strangeness of the occurrence, sent out messengers to search for the owner of the shoe. She was found at Naukratis and brought to the king, who made her his wife, and on her death erected the third pyramid to her memory.

Pliny, whose description is borrowed without remark from other authors, speaks somewhat slightingly of the Pyramids: - 'We must also in passing mention the Pyramids in this same Egypt, an idle and foolish display by the kings of their wealth; and indeed, as most persons maintain, they had no other object in erecting them than to deprive their successors, and rivals plotting against them, of money, or perhaps for the purpose of keeping the people engaged. The vanity of these people in this matter was very great'.

The Arabs call the Pyramids Haram (pl. Ahrâm). Mas'ûdi, one of the Arabian Historians, says that the Pyramids were built three hundred years before the flood by Sûrîd, in consequence of the interpretation of a dream which predicted the deluge. Having assured himself that the world would be repeopled after the flood, he caused the Pyramids to be erected, the prophecy to be inscribed on their stones, and his treasures, the bodies of his ancestors, and records of the whole store of knowledge possessed by his priests to be deposited in their chambers and recesses, in order that they might be preserved for the benefit of those who should come after the flood. According to a Coptic legend, he caused the following inscription to be engraved on one of the Pyramids: - 'I, King

Sûrîd, have built these Pyramids and completed them in 61 years. Let him who comes after me, and imagines he is a king to compare with me, attempt to destroy them in 600 (years). It is easier to destroy than to erect. I have covered them with silk; let him dare to attempt to cover them with mats!' A tradition recorded by the same author resembles the German myth of the nymph of the Lorelei: - ' On the western Pyramid is enthroned a beautiful naked woman with dazzling teeth, who allures desert wayfarers from the south and west, embraces them in her arms, and deprives them of reason'.

> 'Fair Rhodope, as story tells,
> The bright unearthly nymph, who dwells
> 'Mid sunless gold and jewels hid,
> The lady of the Pyramid'.
(Moore.)
According to other myths the spirit of the Pyramid bears the form of a boy, or that of a man, who hovers around it burning incense.

The Pyramids have been frequently visited and described by Christian travellers to Palestine on their way through Egypt. The spurious itinerary of Antony of Piacenza of the 6th cent. states that he visited the twelve granaries of Joseph (the Pyramids), and the same notion was entertained by pilgrims as late as the 14th, 15th, and 16 th centuries. It is worthy of remark that many of the mediæval travellers, even as late as the 17 th cent., concur with the most accurate of the Arabian authors in stating that they saw inscriptions on the Pyramids. 'Abdellatîif, speaking of the inscriptions on the Pyramids, which no one could decipher in his time, says that - 'they are so numerous, that, if one attempted to copy on paper those only which appear on the surface of these two Pyramids (those of Cheops and Chephren) they would fill more than 10,000 pages'. A similar account is given by Mas'ûdi, Maķrîzi, Ibn Haukal, Edrîsi, and other Arabs; and yet on the incrustation of Chefren's Pyramid which is preserved at the top there is now no trace of a single letter. We must therefore conclude that the slabs which have been removed once bore inscriptions.

Construction of the Pyramids. In consequence of the investigations of Lepsius and Erbkam, the mode in which the Pyramids were erected and the meaning of the accomnt given by Herodotus are now very plausibly explained, though several eminent French and other Egyptologists still regard the problem as unsolved. The ancient Egyptians regarded the immortality of the soul as connected with the continued existence of the body; and to preserve their dead from the Nile-floods, they buried them in the rocky soil of the desert. Above the graves of the kings, who wished to be princes even after death, conspicuous piles of stones and earth were raised, and from the practice of protecting these by walls against the desert winds, was developed the pyramidal form. The following questions have been
asked by Lepsius: - (1) How does it happen that the Pyramids are of such different sizes? (2) After Cheops and Chephren had erected their gigantic mausolea, how could their successors be satisfied with monuments so much smaller, and of so different proportions? (3) How is the fact to be accounted for, that an unfinished pyramid is never met with? (4) How could Cheops, when he ascended the throne and chose an area of $82,000 \mathrm{sq}$. yards for his monument, know that his reign would be so unusually long as to enable him to complete it? (5) If one of the builders of the great pyramids had died in the second or third year of his reign, how could their sons or successors, however willing to carry out the plan, have succeeded in completing so gigantic a task, and in erecting monuments for themselves at the same time? And how comes it that many other kings did not, like Cheops, boldly anticipate a reign of thirty years and begin a work of the same kind, the design for which might so easily have been drawn, and might so readily have been carried out by his subjects? - To all these questions the researches of Lepsius and Erbkam afford but one entirely satisfactory answer. 'Each king', says Lepsius in his letters from Egypt, 'began to build hispyramid when he ascended the throne. He began it on a small scale, in order that, if a short reign should be in store for him, his tomb might be a complete one. As years rolled on, however, he continued enlarging it by the addition of outer coatings of stone, until he felt that his career was drawing to a close. If he died before the work was completed, the last coating was then finished, and the size of the monument was accordingly proportioned to the length of the builder's reign; so that, had the progress of these structures always been uniform, it would have almost been possible to ascertain the length of each king's reign from the incrustations of his pyramid, in the same way as the age of a tree is determined by the number of the concentric rings in its trunk'. - The first step taken by the king's architect was doubtless to level the surface of the rock on which the pyramid was to be erected, leaving, however, any elevation in the centre of the area untouched, to form a nucleus for the structure, and to save labour and material. The subterranean chambers were first excavated in the rock, and then extended into the superincumbent masonry. A small building, in the form of a truncated pyramid, with very steep walls, was first erected. If the king died at this stage of the construction, a pyramidal summit was placed on the structure, and its surface was then prolonged down to the ground by filling up the angles formed by the nearly upright sides. If, however, the king survived this first period in the pyramid's history, a new series of stones was placed around it, and the same process was repeated until each successive incrustation became in itself a work of prodigious difficulty. The filling up of the angles could then probably be safely entrusted to the piety of the monarch's successor. The annexed plan will serve to illustrate this explanation.

The rock which in some cases served as the nucleus of the structure is marked $a$; the first part of the pyramid is $b$; on this was placed the pyramidal summit $c$; the angles $d$ were then filled up, and a pyramid on the smallest scale was now completed. If time permitted, the builder next proceeded to place the two blocks e next to the blocks $d$, and above these the blocks $f$. To complete the pyramid on the next largest scale, it was then necessary to crown it with the summit $g$, and to fill up the angles $h$ and $i$. If, for some reason or other, the angles were not filled up, the result was a socalled 'step-pyramid' (p. 164).


A confirmation of the accuracy of this theory is afforded by the ascertained fact, 'that the more nearly the interior of the pyramid is approached, the more careful does the construction become, while the outer crusts are more and more roughly and hastily executed, in proportion as the probable time for their deliberate completion gradually diminished'. The smallest pyramids always consist of the simple structure already described. The outer sides of the complementary triangular stones were entirely polished, except when, as in the case of the third pyramid, the whole surface was to be, as it were, veneered with slabs of granite.

Opening of the Pyramids. The Pyramids are said first to have been opened by the Persians (B.C. 525-333), and it is certain that they were examined by the Romans. The Arabs endeavoured to penetrate into the interior of these stupendous structures, chiefly in hope of finding treasures; and the greater the difficulties they encountered, the more precious and worthy of concealment did they imagine the contents to be. According to 'Abdellatiff, it was Khalîf Mâmûn (A.D. 813-33), son of Harûn er-Rashîd (p. cxx), who caused the Great Pyramid to be opened; but it is probable that that prince merely continued the investigations of his predecessors, as Dionysius, the Jacobite patriarch of Antioch, who accompanied him, found that an entrance had already been effected. Màmûn's workmen are said to have made a new entrance (p. 146) adjacent to the old, with the aid of fire, vinegar, and projectiles. With regard to the success of the undertaking there exist various more or less highly embellished accounts by the Arabian historians;
but one thing appears certain, that the hopes of the explorers were disappointed, and that nothing was found in the already plundered chambers and corridors.

We possess no definite information concerning the opening of the second Pyramid, but 'Abdellaṭîf, who was himself present, gives us an account of the attempted destruction of the Third Pyramid. As early as the reign of Saladin (A.D. 1169-93), the vizier Karakûsh used the Small Pyramids as a quarry for the material of which he constructed various imposing edifices in Cairo, including the Citadel. El-Melik el-'Azîz 'Othmàn (1193-99), Saladin's successor, was persuaded by his courtiers to demolish the so-called 'Red Pyramid', or that of Menkaura. After eight months of incessant labour, however, the senseless undertaking, which had cost enormous sums and prodigious exertions, had to be abandoned. 'Nothing was effected by the undertaking', says 'Abdellatilf, 'but the shameful mutilation of the Pyramid, and the demonstration of the weakness and incapacity of the explorers. This occurred about the year 593 of the Hegira (A. D. 1196). When the stones that have been removed are regarded at the present day, one would think that the structure had been entirely destroyed, but when one then looks at the Pyramid itself, one sees that it has suffered no material damage, and that a part of its incrustation has been stripped off on one side only'. - The Pyramids were also used as quarries at a later period, and even during the régime of Mohammed 'Ali, who moreover is said to have been advised by a prophet to destroy them. With the aid of gunpowder he might perhaps have succeeded in effecting what the workmen of the Khalif had failed to do, had not his European friends represented to him that the blasting operations would probably damage the city of Cairo.

[^33]unknown to previous travellers. To the French Egyptologist Anguste Mariette is chiefly due the merit of having explored the burial-places of Sakkâra (pp. 164, 173), which yielded him a rich spoil.

The pyramids of Gîzeh stand upon a plateau, which extends about 1600 yds. from E. to W. and about 1300 yds. from N. to S., the E. and N. margins being very precipitous at places. The pyramids are built exactly facing the four cardinal points, although the magnet shows an inclination of $8^{\circ} 31^{\prime}$ towards the $W$. A line drawn from the N.E. to the S.W. angle of the largest pyramid is exactly in a line with the diagonal of the second pyramid.

The ${ }^{* *}$ Great Pyramid is called by the Egyptians 'Khufu Khut'

of each side (Pl. $A A$ ) is now 750 ft ., but was formerly (Pl. $B B$ ) about 768 ft . ; the present perpendicular height ( $\mathrm{Pl} . E C$ ) is 451 ft .,

while originally (Pl. EE ), including the nucleus of rock (Pl. FF) at the bottom, and the apex (Pl. CE ), which has now disappeared, it is said to have been 482 ft . The height of each sloping side ( $A C$ ) is now 568 ft ., and was formerly (Pl. BE $) 610 \mathrm{ft}$. The angle at which the sides rise is $51^{\circ} 50^{\prime}$. The cubic content of the masonry, deducting the foundation of rock in the interior, as well as the hollow chambers, was formerly no less than $3,277,000$ cubic yards, and it



Wagner a Debes, Lelpas
still amounts to $3,057,000$ cubic yards. In round numbers, the stupendous structure covers an area of nearly thirteen acres. The material of which it is constructed is stone from the Mokattam and from Turra, containing numerous fossils, chiefiy nummulites (p. 129). With regard to the history and exploration of the pyramid, see pp. 134, 142. Interior, see p. 146.

The Ascent of the Pyramid, though fatiguing, is perfectly safe. The traveller selects two of the importunate Beduins (p.133) and proceeds to the N.E. corner of the pyramid where the ascent usually begins. (The selection of the guides should properly be made by the Shêkh, but this is never done; payment, see p. 134.) Assisted by the two Beduins, one holding each hand, and, if desired, by a third (no extra payment) who pushes behind, the traveller begins the ascent of the large granite blocks, which are each about 3 ft . high. The strong and active attendants assist the traveller to mount by pushing, pulling, and supporting him, and will scarcely allow him a moment's rest until the top is reached. As, however, the unwonted exertion is fatiguing, the traveller should insist on resting as often as he feels indined. 'Iskut wallâ mâfísh balsshîsh' (be quiet, or you shall have no fee) is a sentence which may often be employed with advantage. All requests for bakshîsh should be refused, and it is as well to keep an eye opon one's pockets. - The ascent may be made in $10-15 \mathrm{~min} .$, but, in hot weather especially, the traveller is recommended to take nearly double that time, in order to avoid the discomfort of arriving breathless and heated at the summit. The space at the top at present measures about 12 sq . yds. in area, so that there is abundant room for a large party of visitors.

The **Visw is remarkably interesting and striking. There is perhaps no other prospect in the world in which life and death, fertility and desolation, are seen in so close juxtaposition and in such marked contrast. To the W. (S.W. and N.W.) extend yellowish brown and glaring tracts of sand, interspersed with barren cliffs. The huge and colourless monuments erected here by the hand of man remind the spectator, like the desert itself, of death and eternity. On a bare plateau of rock stand the other pyramids and the Sphinx, rearing its head from the sand, like some monster suffocated by the dust. To the S., in the distance, rise the pyramids of Abuṣîr, Sakkâra, and Dahshûr, and to the N. those of Abû Roâsh. The scene is deathlike, the colouring yellow and brown. Towards the E., on the other hand, glitters the river, on each bank of which stretches a tract of rich arable land, luxuriantly clothed with blue-green vegetation, and varying in breadth. The fields are intersected in every direction by canals, on the banks of which rise stately palms, waving their fiexible fan-like leaves, and interlacing their shadows over the fellâh villages perched like ant-hills on embankments and mounds. In the direction of Cairo runs the long straight carriage-road. Immediately before us rises the Citadel with
the striking minarets of the mosque of Mohammed 'Ali, while the Mokatṭam hills, which form the chief mass of colour in the landscape, gleam in the morning with a pale golden tint, and in the evening with a violet hue.

The descent of the Great Pyramid is more rapidly accomplished than the ascent, but is hardly less fatiguing. Persons liable to giddiness may find it a little trying, but the help of the Beduins removes all danger.

Interior (comp. Plan, p. 144). A visit to the interior of the Great Pyramid is comparatively uninteresting to the ordinary tourist. It will be found fatiguing, and an interval of rest between the ascent and this expedition is recommended. The explorer has to crawl and clamber through low and narrow passages, which, at places, especially near the entrance, are not above $3 \frac{1}{2} \mathrm{ft}$. high and 4 ft . wide. The stones on the floor are often extremely slippery, and the close air smells strongly of bats. The temperature of the interior is $79^{\circ}$ Fahr., i.e., as is usually the case in subterranean chambers, the same as the mean temperature of the outer air in the neighbourhood. Travellers who are in the slightest degree predisposed to apoplectic or fainting fits and ladies travelling alone should not attempt to penetrate into these stifling recesses.

The Entrance (Pl. a) is on the thirteenth tier of stones, on the N. side of the structure $f$, and at a perpendicular height of 48 ft . from the ground. The long passage $a r$, which is now only 3 ft .4 in . in height and 3 ft .11 in . in width, descends in a straight direction at an angle of $26^{\circ} 41^{\prime}$, and is altogether $1061 / 2$ yds. in length. We follow this passage as far as the point $d$ only, 20 yds . from the entrance. A huge triangular trap-door of granite (Pl. b) here arrests the farther progress of the explorer. During the lifetime of the royal builder of the pyramid this door was propped open by beams or suspended by iron cramps at the sides, but after the interment of the king was let down into its place. The hardness of the material of which this barrier consists compelled the Arabian treasure-hunters (p. 142) to avoid it, and to force a new passage (Pl. d) through the softer limestone. This is the roughest and most awkward spot on the whole route. Beyond the rugged blocks at this point we enter a passage ( Pl. ce), ascending at about the same angle, and 41 yds. in length, beyond which lies the Great Hall (Pl. $h$ ). Before entering the latter, we diverge at the point $e$, by the horizontal passage ef, to the so-called Chamber of the Queens (Pl. g). This passage is at first 3 ft .9 in . only in height, but at a distance of $61 / 2$ yds. from the chamber the flooring sinks a little, so that the height increases to 5 ft . 8 inches. The N. and S. sides of the chamber are each 17 ft . in length, and the E . and W. sides 18 ft .10 inches. The height is 20 ft .4 in ., including the pointed roof, which consists

[^34]of enormous blocks of rock placed obliquely and leaning against each other, and projecting beyond the sides of the walls to a distance of $51 / 2 \mathrm{ft}$. into the surrounding masonry. We now return to $e$ and enter the Great Hall (Pl. h), the handsomest of the comparatively small chambers in the interior of this colossal mass of masonry. The jointing and polish of the fine-grained Mokattam limestone form an unsurpassable marvel of skilful masonry. As the visitor can now breathe and look about him with more freedom, he may verify the accuracy of 'Abdellatîf's remark, that neither a needle nor even a hair can be inserted into the joints of the stones. The Great Hall is 28 ft . high and 155 ft . long. The lower part is 3 ft .4 in . in width; and the upper part, beyond the last of the panels of stone, each of which is 1 ft .8 in . thick and 2 ft . high, is 7 ft . in width. The seven courses of stone composing the roof, which seem to have been arranged in imitation of the arch-principle, project slightly one above the other, serving to strengthen and support the horizontal slabs which form the ceiling. The parallel incisions in the pavement and on the walls were perhaps used to facilitate the introduction of the sarcophagus, and they now serve to prevent the visitor from slipping. At the end of the Great Hall is a small horizontal passage, 22 ft . long and 3 ft .8 in . high, expanding about the middle into an Antechamber (Pl. i), which was once closed by four trap-doors of granite. The remains of these slabs, in their pendent position, should be noticed. We next enter the King's Chamber (Pl. k), the most interesting of all. The N . and S . sides are each 17 ft . in length, the E . and W. sides $341 / 2 \mathrm{ft}$., and the height is 19 ft .; the floor of the chamber is $1391 / 2 \mathrm{ft}$. above the plateau on which the Pyramid stands. The chamber is entirely lined with granite, and is roofed with nine enormous slabs of granite, each $181 / 2 \mathrm{ft}$. in length, above which several chambers have been formed to relieve the superincumbent weight (see below). The chamber now contains nothing but an empty and mutilated sarcophagus of granite, bearing no trace of an inscription, the lid of which had disappeared before the time of the French expedition. Length $7^{1 / 2} \mathrm{ft}$., width 3 ft .3 in., height 3 ft . 4 inches. The very massive sides ring with a clear tone when struck. Curiously enough, the King's Chamber does not lie exactly in a line with the diagonal of the Pyramid, but is 16 ft .4 in . to the $S$. of it.

About 3 ft . above the floor are the ends of the Air Shafts ( $w, x$ ) by which the chamber is ventilated, and which were re-opened by Col. Vyse. They are about 6 in . in height and 8 in . in width only, expanding by a few inches at the outer extremities. The N. shaft is 234 ft ., and the S . shaft 174 ft . long. We now retrace our steps, and, on emerging from these awe-inspiring recesses, hail the light and air with no little satisfaction.

Owing to the prodigious weight of the superincumbent masses, it would have been extremely hazardous simply to roof the King's Chamber
with long horizontal slabs, but the cautious architects of Cheops foresaw the danger and relieved the ceiling of the weight by introducing five Hollow Chambers above it. The four lowest ( $l, m, n, 0$ ) have flat ceilings, while the highest ( $p$ ) is roofed with blocks leaning obliquely against each other. These chambers are accessible from the Great Hall (p. 147), but not without great difficulty. - The first chamber ( $l$ ) is named ' $D a$ vison's Chamber', after its discoverer (1763). The four others, discovered by Col. Vyse and Mr. Perring, were named by them Wellington's ( $m$ ), Nelson's ( $n$ ), Lady Arbuthnot's ( 0 ), and Col. Campbell's ( $p$ ) chambers. The discovery of the last of these was particularly important, as the name of Khufu (p. cxxxix) was found in it. Lady Arbuthnot's Chamber contains the name of Khnum ('builder') Khufu. These inscriptions are in red paint, and were doubtless placed on the stones as distinguishing marks by the quarrymen, as some of them are now upside down.

The other chambers in the interior of the Great Pyramid as yet discovered are difficult of access and do not repay a visit. The first passage $a, b, r$, leading downwards in a straight line, 293 ft . in length, terminates in a horizontal corridor, 27 ft . in length, 3 ft . in height, and 2 ft . in width, which leads to the subterranean chamber $s$, hewn in the rock. The $E$. and $W$. sides of this chamber are each 46 ft . in length, the $N$. and S . sides 27 ft , and the height $101 / 2 \mathrm{ft}$. It does not lie in a line with the diagonal of the Pyramid, and its floor is $1011 / 2 \mathrm{ft}$. below the level on which the Pyramid is built. The subterranean horizontal passage $t$ leads nowhere. The statement of Herodotus ( $p$. 135) that the subterranean chamber planned by Cheops for the reception of his body lay on a kind of island, surrounded by a canal which was conducted hither from the Nile, is erroneous, as the chamber lies above the highest level of the overflow of the river, and it has, moreover, been ascertained that no channel from the river leads in this direction. - From the lower end of the Great Hall a shaft, discovered by Davison in 1763 , descends to the lower passage, and is erroneously known as the 'Well'. The enterprising Caviglia found that it terminated in the passage leading to the subterranean chamber ( $r$ ), and in 1831 Sir G. Wilkinson rightly explained that it must have been made to enable the workmen to quit the Pyramid after the upper passages had been closed. It must at all events have been constructed at a later period than the masonry itself, as it has been obviously bored through it.

The Second Pyramid (which cannot be ascended, but should be entered by scientific visitors), called by the Egyptians $\Delta u r$, the 'great' or 'considerable', was erected by Khafra, who was called Chephren by the Greeks (p. 98), but his name has not been discovered on any part of the structure. Owing to the greater height of the rocky plateau on which it stands, it appears higher than its larger neighbour. The perpendicular height of this Pyramid is now 450 ft . (formerly 458 ft .), each side of the base measures $6941 / 2 \mathrm{ft}$. (originally $7113 / 4 \mathrm{ft}$.), and the height of each sloping side is $5663 / 4 \mathrm{ft}$. (originally $575^{3} / 4 \mathrm{ft}$.), while the sides rise at an angle of $52^{\circ} 20^{\prime}$. The solid content of the masonry is now 2,156,960 cubic yds., equivalent to $4,883,000$ tons in weight (originally $2,426,710$ cub. yds., equivalent to $5,309,000$ tons). As the rocky site rises towards the W. and N., a considerable part of it required to be removed in order that a level surface might be obtained. The levelled space surrounding the base of the Pyramid was paved with blocks of limestone (see pp. 156, 157). To the E. are remains of the temple erected
for the worshippers of the deceased Pharaoh, a structure of the kind which probably adjoined all large pyramids (pp. 154, 155). The incrustation of the Pyramid, which must have been preserved down to the middle of the 17 th cent., seems to have been laid on in a rough condition and to have been polished afterwards, beginning from the top. The lower courses were left in the rough, a circumstance which led the French savants to suppose that the Pyramid was once surrounded by a pedestal. The merit of having opened this Pyramid belongs almost exclusively to Belzoni, a most enterprising and successful explorert. An inscription over the entrance records that the opening took place on March 2nd, 1818.

The Interior is entered by two passages on the N. side. The mouth of one of these is in the level surface in front of the Pyramid, and was concealed by the pavement; that of the other is on the N. side of the Pyramid itself, now 38 ft ., but formerly 49 ft . above the level of the ground. This Upper Passage, which was lined with granite at the beginning, descends at an angle of $25^{\circ} 55^{\prime}$ to a depth of 105 ft ., leading first to a horizontal corridor, and thence to 'Belzoni's Chamber', which once contained the tomh of the deceased, situated 3 ft .10 in . to the $E$. of the diagonal of the Pyramid. This chamber is hewn in the rock, and roofed with painted slabs of limestone leaning against each other at the same angle as that formed by the sides of the Pyramid. It is $221 / 2 \mathrm{ft}$. in height, $461 / 2 \mathrm{ft}$. in length from E. to $W$., and $161 / 3 \mathrm{ft}$. in width from N. to S . Belzoni here found a granite sarcophagus let into the ground and filled with rubbish, 3 ft . in height, 6 ft .7 in . in length, and $31 / 2 \mathrm{ft}$. in width, and destitute of inscription. The lid was broken. The Lower Passage, entered from the pavement on the $N$. side of the Pyramid, descends at first at an angle of $21^{\circ} 40^{\prime}$, reaches a trap-door, runs in a horizontal direction for 59 ft ., and then ascends, terminating, after a distance of 97 ft . in all, in the horizontal corridor leading to Belzoni's Chamher. On the E. side of the middle of the horizontal portion of this lower passage was introduced a small chamber; and, connected with it on the $W$. side by means of a descending passage, 22 ft in length, was another chamber hewn in the rock, 8 ft .5 in . in height, 34 ft .3 in . in length, and 10 ft .4 in . in width.

[^35]The Third Pyramid, named by the Egyptians or 'the upper', was erected by Menkaura, the Mykerinos of Herodotus. Its present perpendicular height (Pl. $B B$ ) is 204 ft ., its former height ( $B C$ ) was 219 ft .; the side of the base ( $A A$ ) is $3561 / 2 \mathrm{ft}$.; the present height ( $A B A$ ) of the sloping sides is $263^{3} / 4 \mathrm{ft}$., being originally ( $A C A$ ) $2793 / 4 \mathrm{ft}$.; these rise at an angle of $51^{\circ}$. The rock on which the Pyramid stands has a shelving surface, and the necessary horizontal site was formed by building up a pedestal of enormous blocks, instead of by removing a portion of the rock. The stones of which the Pyramid is constructed are remarkably large and

well hewn. The lower part of it is covered with slabs of polished granite, and the upper part with rough stones. The incrustation and the material which once filled the angles of the exterior are now so damaged that the tiers of the internal nucleus are almost everywhere visible. On the E. side are relics of a temple (comp. pp. 154, 155).

The Interior is in many respects particularly interesting, and the access to it was formerly easier than that to the Pyramid of Cheops, but the Beduins have unfortunately allowed it to hecome choked with sand. The entrance is on the N. side, 13 ft . ahove the ground. A passage ac descends at an angle of $26^{\circ} 2^{\prime}$ to a distance of $1041 / 2 \mathrm{ft}$, being lined with granite where it passes through the masonry from $a$ to $b$, and then penetrating the solid rock from $b$ to $c$. From $c$ a slightly descending passage $c d$ leads to a whitewashed antechamher $f, 7 \mathrm{ft}$. in height, 12 ft . in length, and 10 ft . in width, and, heyond this chamher, passes three trap-doors $g$, which were intended to arrest the progress of intruders. The passage $h d$ then hecomes nearly horizontal (gradient $4^{\circ}$ ) for a distance
of $411 / 2 \mathrm{ft}$., and finally descends to the chamber $e$, which is $441 / 2 \mathrm{ft}$. long, $121 / 2 \mathrm{ft}$. broad, and, owing to the unevenness of the rock from which the pavement has been removed, varies from 13 ft . to 13 ft .5 in . in height. The remains of a sarcophagus let into the ground were found here, but not that of Menkaura, which was carefully ensconced in a still lower tomb-chamber.

The pavement of the chamber $e$ covers the mouth of a shaft 29 ft . in length, which is closed by a trap-door, and is flanked with a projecting block of granite on each side, 11 ft . wide and 2 ft .4 in . high, designed to prevent the removal of the sarcophagus. Beyond the trap-door the passage descends 2 ft .5 in . more, and a horizontal shaft, 10 ft . in length, finally leads thence to the Tomb Chamber (Pl. i), which is by far the most interesting of all those yet discovered within the pyramids. It is paved with blocks of granite, $21 / 2 \mathrm{ft}$. in thickness, and its ceiling is arched in the English Gothic form. The arch has been formed by placing the stones against each other at an angle so as to resemble a roof, and then hollowing them out on the inside. The sarcophagus of Menkaura was found here by Col. Vyse in a good state of preservation. It was externally 2 ft .7 in . high, 8 ft . long, and 3 ft . wide. The lid was gone, but its remains were found in the chamber $e$, and beside them the upper part of the wooden coffin, which, as the inscription on it recorded, once contained the body of Menkaura. The finely executed sarcophagns was composed of brown basalt, showing a blue tint where broken. The vessel in which it was being conveyed to England was unfortnnately lost off Carthagena in the S. of Spain, but drawings of the precious relic have been preserved. The inscription on the wooden lid, now preserved in the British Museum, rnns as follows: - 'Osiric King Men-kau-ra
 ever-living, who art descended from heaven, who wast borne under the heart of Nut, and heir of the sun. Thy mother Nut spreads herself over thee in her name, which is the mystery of heaven. She has granted thee to be like a god, annihilating thy enemies, King Menkaura, ever-living!?

The second and third Pyramids are most conveniently visited in the course of the circuit of the Pyramid plateau mentioned on p. 156. After inspecting the Great Pyramid visitors usually proceed to the Sphinx which rises from amidst the sand of the desert about 350 yds . to the S.E. The path thither leads between the supposed 'mortar pits' (Pl. m) and three Small Pyramids of no interest. That in the centre, according to Herodotus, was the tomb of a daughter of Cheops; that to the S., according to an inscription preserved in the Museum of Gîzeh, belonged to Hentsen, another daughter of the same king.

The **Sphinx ${ }^{+}$, which, next to the Pyramids themselves, is the most famous monument in this vast burial-ground, is hewn out of the natural rock, and, with some aid from artificial masonry, has been moulded into the shape of a recumbent lion with the head of a man. The body was left in a rough form, but the head was originally most carefully executed. The entire height of the monument, from the crown of the head to the pavement on which the fore-legs of the lion rest, is said to be 66 ft . (see p. 152). Not long ago the head, neck, and a small part of the back were alone visible, but at

[^36]present the whole front part of the flgure rises clear of the sand. The ear, according to Mariette, is $41 / 2 \mathrm{ft}$., the nose 5 ft .7 in ., and the mouth 7 ft .7 in . in length; and the extreme breadth of the face is 13 ft . 8 inches. If the traveller stands on the upper part of the ear, he cannot stretch his hand as far as the crown of the head, and the space between these points must have been greater when the headdecoration, which, as well as the greater part of the beard, is now broken off, was still intact. There is a hollow in the head, into which one of the Arabs may be desired to climb. The face was deplorably mutilated at a comparatively recent period by a fanatic, iconoclastic shêkh, and afterwards by the barbarous Mamelukes, who used it as a target. It would appear from 'Abdellaṭ̣̂'s account that it was in perfect preservation in his time : - 'This face is very pleasing, and is of a graceful and beautiful type; one might almost say that it smiles winningly'. He also describes the proportions of the head very
 minutely. An older writer, however, states that the nose was mutilated in his time, and, as it is now entirely destroyed, the face somewhat resembles the negro type, though the mouth still has a smiling appearance. The stone formerly had a reddish tint which has now entirely disappeared.

The complete excavation of the Sphinx was first undertaken by $C a-$ viglia ( p .143 ), at the cost ( $450 l$.) of an English society. He discovered the flight of steps which ascended to the stupendous monument, and also found between the paws of the lion a carefully laid pavement, at the end of which next to the breast of the Sphinx rose a kind of open temple, divided by two partitions, through which ran a passage, containing a small figure of a recumbent lion, facing the Sphinx, in the middle. In the background rose a stele, and at the sides were two others,


Granite Temple, Sphinx \& Creat Pyramidof Cheops
(Seen from the South East.)


The Sphinx.
(Seen from the North East.)
forming a kind of wall. The one next the breast of the Sphinx was particularly interesting from the fact that it bore the date of the reign of Tutmes III. of the 18th Dynasty. Several of these relics are now preserved in the British Museum. The Sphinx was also entirely excavated by Mariette.

It was pointed out by Lepsius in 1843 that the Sphinx must have been founded earlier than the 18th Dynasty, notwithstanding the above-mentioned inscription on one of the tablets. The date there given is the first year of the reign of Tutmes III., and it is quite clear that the gigantic work could not have been begun and ended in a single year, while there is little reason to suppose that a king resident in Thebes would have adorned the necropolis of Memphis with such a monument. Moreover on the stele occurs the cartouche
 of Khafra or Chephren, the $\bar{\mp}$ alone
having been obliterated. The conjecture that the builder of the second Pyramid was also the founder of the Sphinx seemed to be confirmed by the discovery of the statue of Chephren in the rocktemple adjoining the Sphinx (p. 154).e The monument has even been supposed to be entitled to claim still higher antiquity; for M. Mariette, while examining a ruined building at the foot of the southernmost of the three pyramids which rise to the E. of the Great Pyramid, found a stone built into a wall, bearing an inscription which seemed to imply that the Sphinx already existed in the time of Khufu, the builder of the first pyramid. The inscription on the right side of the stone runs literally thus:- 'The living Horus, the King of Upper and Lower Egypt, Khufu, the life-dispensing, found (in making excavations) the Temple of Isis, the patroness (hant) of the Pyramid in the place (i.e. in the immediate vicinity) of the Temple of the Sphinx'.

The Sphinx is written 8 负 $h u$, which signifies 'to guard' or 'watch', or 'the watchman'; and it is sometimes also called 'hu of Harmachis.' Tutmes III. (p. cviii) restored the Sphinx, and seems specially to have revered it, as is indicated by numerous small monuments which bear the figure of the Sphinx coupled with his name or his portrait. In the inscription already referred to, the Sphinx is said to speak to Thothmes 'as a father to his son', and to address him in the words - 'I am thy father Harmachis'. Though more or less buried in sand at various periods, the Sphinx was highly admired and revered down to so late a period as that of the Roman emperors, as numerous inscriptions upon it, now concealed by the sand, testify. Curiously enough, the Sphinx is mentioned neither by Herodotus nor any later Greek traveller.

Signification of the Sphinx. The Greeks and Romans call the Sphinx Harmachis, or Armachis, which is equivalent to the ancient Egyptian

Har-em-khu, i.e. Horus on the horizon, or the sun in the act of rising. Harmachis is the new-born light which conquers darkness, the soul which overcomes death, or fertility which expels barrenness. He achieved some of his most brilliant exploits in the form of the winged disk of the sun, and conquered his enemies in that of a lion with a human head, i.e. in the form of a sphinx. In a papyrus preserved at Berlin the solar god is said sometimes to take the form of a lion, and other shapes also. Harmachis, in the burial-places, promises resurrection to the dead. The East belonged to him; and as Tutmes III. carried his sway farther to the E. than any of his predecessors, it was not unnatural that he should have showed special veneration for the Sphinx-Harmachis, and chosen him for his tutelary god. - The Assyrians provided their sphinxes with wings as symbols of speed and of the power of rising above earthly things.

About 150 paces to the S.E. of the Sphinx is situated the *Granite Temple, a large building constructed of granite and alabaster, discovered by Mariette in 1853 . The object of the building has not yet been ascertained, but there can be no doubt that it was in some way connected with the Sphinx. The inscription of Khufu mentioned at p. 153 speaks of a Temple of the Sphinx. The statues of Chephren (p. 98) found here seem to indicate that he was the founder of this structure. At the same time the building so closely resembles a mastaba (p. 173), that it seems not improbable that Chephren erected this edifice as a place of assembly for the worshippers of his manes. A paved walk leading from the second Pyramid to this temple strengthens this supposition. The building is a fine example of the simple and majestic architecture of that remote period, when the art of working the hardest kinds of stone had already attained perfection. The chisel which in the hand of the stone-mason shaped these blocks of granite with such exquisite skill, could doubtless, when wielded by the sculptor, easily create a statue of Chephren.

Descending by a modern Passage (Pl. aa) in steps, protected by walls against the encroachment of the sand, we pass through a door $(b)$ into a Passage ( $b b$ ) descending towards the E., 6 ft .8 in . in width and 79 ft . in length. On the right, halfway down this passage, is the entrance to a Chamber (c) constructed entirely of blocks of alabaster ; opposite to it, on the left, is the Entrance (d) to a flight of steps, which turns at a right angle and ascends to a small chamber, where an opening on the $S$. side leads to the granite roof of the temple. This passage and chamber are also constructed of alabaster. - At the E. end of the corridor we enter a Hall (Pl. ee), 79 ft . in length (N. to S.) and 23 ft . in width, embellished with six monolithic pillars of granite which supported the enormous blocks of the ceiling, two of which are still in situ. - Adjoining this hall is another similar Hall (Pl. ff ), $571 / 2 \mathrm{ft}$. long and 29 ft . wide, the ceiling of which was borne by ten columns of granite in two rows. The stone beams of the ceiling to the right still preserve their sharp edges on the side towards the centre of the room, while even on the other side they are but little injured. - At the S.W. corner of Hall ee is a Door $g$, leading into the Corridor $g g$,
which is adjoined on the left by the Chamber $i$. At $h h$, farther on, and also at the end of $g g$, are niches in two stories, one above the other, probably destined for the reception of mummies. - Returning to Hall ee, we proceed to Passage $k$, in the middle of the E. side, which leads between walls 13 ft . in thickness to Chamber $l$, the last on the E. side of the building, and destitute of columns. At the point $m$ in this apartment, Mariette found a deep well containing water, but now filled with sand, in which he discovered no fewer than nine statues of Chephreu. The best of these are now in the Museum of Gizeh. Several dogheaded apes executed in stone, were also found in the sand here. At the N. and S. ends of this apartment are two side-chambers, one of which (Pl. $n$ ) only is now accessible, the other having been built up.

Between the Granite Temple and the Sphinx excavations have laid bare a series of walls, which
 consist of Nile mud and gravel and obviously date from the Roman period.

The tombs surrounding the different pyramids, where the relatives, priests, and state officials of the kings were interred, are far inferior in interest to the Tomb of Ti at Sakkâra (p. 173) and the graves in Upper Egypt. Travellers who propose to visit Sakkàra need waste no time here; otherwise the so-called Tomb of Numbers and Campbell's Tomb are usually visited.

The Tomb of Numbers (Pl. $n$ ), so called from the enumeration it contains (as usual in other tombs also) of the cattle possessed by the deceased. This tomb, which lies on the E. slope of the plateau of the Pyramids (p. 134), belonged to a certain Khafra-anlch and his wife Herneka. The representations and hieroglyphics it contains are either partly or entirely obliterated. Khafra-ankh was a
'semer' or companion, and a 'suten rekh', or blood-relation of the king, to whom his wife, a priestess of Neith, was also related. He is extolled as the illustrious priest of the Pyramid of Khafra, surnamed 'the great'. On the E. wall of the principal chamber we see writers engaged in recording the number of cattle of each kind possessed by the deceased. The representatives of the different flocks placed beside the numbers are admirably executed, and faithful to nature even in their attitudes. The sign $\mid$ is equivalent to $1, \cap$ to 10 , and © to 100 , these symbols being repeated so as to represent the hundreds, tens, and units of which the various flocks consisted. Thus @@@@ @ПIII coupled with the figure of a bull, indicates that Khafra-ankh possessed 835 bulls, and in a similar manner we are informed that he had 220 cattle without horns, 760 asses, 2235 goats of the antelope kind, and 974 ordinary goats.

Campbell's Tomb is larger than most of the others and is of comparatively late origin, dating, as the inscriptions record, from the 7th cent. and the 26th Dynasty. The upper part has been entirely destroyed, and the deep and wide shaft, at the bottom of which is a tomb-chamber vaulted with an arch having a span of 11 ft ., is now uncovered. The tomb was discovered in the course of excavations made by Col. Vyse in 1837, and named by him after Col. Campbell, the British consul-general of Egypt at that period. The four sarcophagi found here were in niches, and not in the vaulted chamber. One of these, now in the British Museum, is composed of red granite, and prismatic in form, and bears numerous inscriptions. Two others are in basalt and another in whitish quartzose stone. From all of these the bodies had been removed.

Travellers who are not pressed for time and who desire to obtain a closer view of the second and third Pyramids, are recommended to make the following *Circuit of the Pyramid Plateau of Gizeh, coucluding with the visit to the Sphinx (comp. p. 133).

After having inspected the Great Pyramid (p. 144), we turn (following the dotted line on the Map, p. 144) to the left (W.) of the entrance, descend the mound of debris, and proceed to the N.W. angle of the Pyramid, where its foundation-stone ( Pl . b) has been exposed to view. Towards the W. and S.W. lie numerous tombs (mastabas, p. 170), but they present no attraction, being almost all in very bad preservation and more than half buried in the sand. Some of those to the S.W., now quite buried, belonging to high officials under the 5th Dyn., have materially helped the compilation of an accurate list of the kings of that Dyn., who are mentioned in the inscriptions. Two pillars and an architrave of one of these tombs are now in the Berlin Museum. Two of the best preserved and comparatively most interesting of the graves lie almost due $\mathbf{N}$. of the N.W. angle of the second Pyramid. The more N., to the
right, has a handsome lintel with mutilated inscriptions; and in the interior are numerous hieroglyphics and fine reliefs, with traces of painting. The entrance is impeded by drift-sand and the figure in the reliefs are half-buried. The S. tomb has a perfect gateway and a larger architrave; but the interior is covered with sand to the depth of 18 inches. To the $N$. of this point are also several rows of tombs now filled up.

We now skirt the $W$. side of the vast necropolis, and reach the N.W. angle of the rocky enclosure of the court of the Second Pyramid. A natural cleft in the rock ( Pl . $d$ ) here facilitates our descent from the top of the rock, which is 16 ft . in height. At the foot of it we reach the plateau which was hewn in the rock in order to prepare a level surface for this pyramid (p. 148). Part of the surface on the N. side (Pl.e) is divided by means of deep incisions and transverse furrows into six rows of squares, the object of which is unknown. On the rock above is inscribed the name of Ramses II. in hieroglyphics. On the E. side of the Pyramid are remains of the temple once connected with it (p. 148). We follow the W. side of the Pyramid. On the rock to the right is a hieroglyphic inscription (Pl. $f$; the name of an architect, and uninteresting), near which are several rock-tombs. One of these tombs (Pl. g), nearly opposite the S.W. angle of the Pyramid, has a *Ceiling hewn in the rock in imitation of palm-stems. (Visitors should beware of falling into the tomb-shaft.) In passing the W. side of the Pyramid the visitor has an opportunity of observing, that, although several triangular blocks of granite are strewn around, which perhaps once formed the lower portion of the external incrustation of the Pyramid, the upper quarter of the Pyramid is covered with soft limestone from Turra.

Our route now leads towards the S.W. to the Third Pyramid (p. 150), once entirely covered with huge blocks of granite, the lower courses of which are still in tolerable preservation. To the S. of it stand three small Pyramids of no interest, in the middle one of which the name of Menkaura, builder of the Third Pyramid, is painted on the ceiling.

We leave the temple ( p .150 ) belonging to the Third Pyramid on the left, and descend by a good path towards the E. Here on the left is another series of rock-tombs dating from the 4th and 5th Dynasties. Among these is that of Tebehen (Pl. $h$; beware of the mummy-shafts), with four chambers and two recesses. On both sides of the partition are representations of persons dancing with raised arms and feet before the altar (candle necessary).

In the valley before us, to the right, rises a projecting ridge of rock coutaining tombs of no interest. Adjoining this rock, on the left, are three sycamores and two date-palms, rising above an Arabiall burial-place. Still farther to the E. we observe the remains of the stone embankment leading from the plain of the Nile to the Third Pyramid (p. 135). To the left of the trees rises a kind of truncated

Tower, constructed partly of the natural rock and partly of masonry, and supposed to have been a tomb. Passing through it, we come to other tombs on the left, also covered with sand.

We complete our circuit of the plateau of the Pyramids by visiting the Sphinx (p. 151) and the Granite Temple (p. 154; with deviations to Campbell's Tomb, and the Tomb of Numbers, pp. 156, 155), and then return to the Great Pyramid. On the S. horizon, at a distance of $61 / 4 \mathrm{M}$., rise the pyramids of Abuṣir (see below) and the step-pyramid of Sakkâra (p. 164).

A visit to the Pyramids of Sakkâra may be combined with that to the Pyramids of Gìzeh by travellers who spend the night at the Mena House (p. 133), or at Mariette's house at Sakkâra (p. 166). In the former case we leave Gizzeh in the morning; in the latter case in the afternoon, and ride viâ $A b u s i r$ to ( $23 / 4 \mathrm{hrs}$.) Sakkâra, skirting the margin of the desert. To the left lie patches of cultivated land and a number of ponds, containing more or less water in accordance with the height of the last inundation, bordered with vegetation, and frequented by numerous birds; beyond which flows the Bahr Yûsuf arm of the Nile (p. 160). After 1 hr . we observe the remains of two pyramids on the right. The first of these (N.), near the village of Záwyet el-「Aryân, must once have been an important monument, as the sides are still nearly 100 yds . in length. The second (S.), near the hovels of Riga, is now a mere heap of debris.

In one honr more, passing the village of Shoberment, we reach the Pyramids of Abusir (comp. Map, p. 164), tbe ancient Busiris (2 hrs. to the S.S.E. of the Pyramids of Gîzeh, and $3 / 4 \mathrm{hr}$. to the N.N.E. of Sakkâra), situated on a rocky eminence covered with sand. The masonry of these monuments, having originally been constructed with no great care, is now mnch damaged, and their bases are covered with sand, so that a visit to them is uninteresting. They were erected by kings of the 5th Dynasty. The entrances are on the N. sides, and the interior chambers are almost completely in rnins. The northernmost of the three largest pyramids conce fourteen in number), lying close together, belonged to a certain Sahura, and was styled that of the 'glorious emerging' (i.e. of the deceased into another world). At a very early period divine honours were accorded to this Pharaoh, and sacrifices were offered to his manes so late as the time of the Ptolemies. The pyramid was connected by a still traceable path with a bnilding (probably a temple) sitnated in the plain. Its perpendicular height was $1631 / 2 \mathrm{ft}$. (now 118 ft .), its sides were $2581 / 2 \mathrm{ft}$. (now $2171 / 4 \mathrm{ft}$.) in length, and they were inclined at an angle of $51^{\circ} 42^{\prime} 35^{\prime \prime}$. With regard to the central one of these pyramids, that to the $S$. of the last, the inscriptions state that 'the dwelling of Ra-en-user' stands fast'. Ti (p. 173) and other priests, whose mastabas were fonnd at Sakkâra, presided over the rites connected with this pyramid. The name of the largest pyramid (sides 108, formerly $1201 / 2$ yds.; perpendicular height 165 , formerly 229 ft.$)$, situated a little to the S.W., is unknown. The other pyramids are mere heaps of ruins, and one of them (to the S.W. of the largest) seems never to have been completed.

The mastaba of Ptah Shepses, discovered by M. de Morgan in 1893, belongs to the 5 th Dyn.; it contains columns in the shape of lotus-stalks, the only example of the kind dating from the Early Empire.

Continning our route to Sakkâra, we leave to the left a pond and the village of Abusir, situated beyond a group of palms to the S.E., and soon reach the sandy eminences of the Necropolis of Memphis, and Mariette's house (p. 166), $3 / 4 \mathrm{hr}$. from the first pyramid of Abuṣir.

## 9. Theo'Site of Ancient Memphis and the Necropolis of Sakkâra.

A visit to Memphis and Sakkâra may easily be accomplished in one day. Provisions should not be forgotten; a magnesium-lamp is also essential for a satisfactory examination of the tomb of Ti ; candles may be procured at Bedrashên in the Greek 'bakkâl' or shop mentioned at p. 160. - Travellers, especially those who intend to go on to Upper Egypt, should provide themselves with an Admission Ticeet from the Service des Antiquités de l'Egypte (price $\mathscr{L} \mathrm{E} .1$ ), which may be obtained at the Gizeh Museum or from Messrs. Cook or Messrs. Gaze (p. 29), and is more economical than paying for admission to each monnment separately.

The following arrangement of the journey will be found convenient. Take the train at 7 or 8 a.m. to ( $3 / 4-1 \mathrm{hr}$.) Bedrashên, where donkeys and drivers ( 5 pias. each; more in the height of the season) are in waiting. Ride vià the site of Memphis, where the "Colossi of Ramses (p. 161) are inspected, to the Necropolis of Sakkdra, and thence, passing the *Step Pyramid (p. 164) to ( 2 hrs . in all) Mariette's House (p. 166). For luncheon and a visit to the ${ }^{* * A p i s}$ Tombs ( p .167 ) and the ${ }^{*}$ Tomb of $T i$ ( p . 173) 4 hrs. should be allowed; and possibly time may be found for the inspection of the Unas Pyramid (p. 165) or the recently discovered Mastaba of Mera (p. 185). For returning to the station of Bedrashên $1 / 2 \mathrm{hr}$. more should be reckoned. The train from Upper Egypt generally reaches Bedrashên about 6.30 p.m., but the railway time-table should be consulted. A calm day should be selected for the expedition (p. 1;33). - Messrs. Thos. Cook * Son organize excursions to Sakkâra once a fortnight (announced at the hotels), and Messrs. Jean Sfer \& Co. (p. 29) twice weekly, but the haste with which these excursions are conducted and the crowd of tonrists taking part in them are out of keeping with the dignified and solemn associations of the spot.

Travellers who wish to devote $11 / 2-2$ days to Sakkâra may pass the night at Mariette's house (p. 166), or on its covered terrace. A blanket is a sufficient covering in spring. Only the above-mentioned tombs are open to visitors unprovided with special permission from the museum-authorities at Gizeh (comp. p. 167); but both, especially the Tomb of Ti, repay careful and repeated examination. - A visit to the baths of Helwodn (p. 188) may be combined with this excursion, by crossing the Nile at Bedrashên (taking donkeys also), and thence riding for $11 / 2 \mathrm{hr}$.

The route from the Pyramids of Gîzeh to Sakkâra is described at p. 158.

The trains start from the $Z a b t i$ yeh Station (p. 27). The railway crosses the Nile, passes Embabbeh (p. 92), and makes a wide curve to ( $61 / 4 \mathrm{M}$., in 25 min .) Bûlâk ed-Dalr $\hat{\mathrm{u}}$ r. Farther on, near the station of Gizeh ( 8 M.; p. 94), the Pyramid of Cheops appears on the right. On the left, beyond the Nile, we now perceive Old Cairo with its windmill hills, above which rises the long ridge of the Mokattam, separated from the heights of the Wâdi et-Tîh (p. 132) to the S. by the broad depression of the Gebel Turra (p. 190). On the banks of the Nile are the large military establishmeuts of Turra. To the right rise the hills of the Libyan desert with the Pyramids of Abuṣir (p.158). We next observe the step-pyramid, which, however, soon disappears behind a grove of palms. On the right and left of the line are tracts of arable land. To the left at the foot of the Gebel Ṭurra lie the baths of Helwân (p. 188).

At ( 20 M .) Bedrashên visitors bound for Memphis and Sakkeâra leave the train, which goes on to Upper Egypt. The station lies to
the right of the line, and near it is a very ancient and most interesting Jewish burial-ground. We ride along the railway, turn to the right, and cross a bridge to the mud-huts of Bedrashên, scantily shaded by palm-trees. Beyond the bridge (a Greek 'bakț̣âl' on the right; p. 159) we turn to the S. (left), leaving the village on the right, and ride on the embankment to the W. towards a conspicuous palm-grove. Immediately beyond the last houses of Bedrashên we observe to the right, at a distance of $1 / 2$ M., a lofty heap of rubbish, helonging to a government manufactory of saltpetre. On each side of the embankment lie green fields in spring and summer, and large expanses of water in autumn and the first half of winter. The embankment ends near the first trees of the palm-groves, 20 min . from the station.

The insignificant sandy expanse before us, shaded by palms, and strewn with blocks of granite, broken pottery, and fragments of brick, is the ancient Site of Memphis, which is now interesting in an historical point of view only. Were it not for the vast Necropolis to the $W$. of the ancient city, no one would imagine that one of the most famous and populous capitals of antiquity had once stood here. The Egyptians, from the earliest period down to the Roman imperial epoch huilt their edifices, with the exception of palaces and temples, of large sun-dried bricks of Nile-mud; hut even the public buildings of Memphis have entirely disappeared, as the stones were carried off in former centuries to huild other edifices on the right bank of the Nile (see p. 161). The narrow streets, which are said to have heen half-a-day's journey in length even down to the 12 th cent., extended between the Nile and the Bahr Yûsuf, to the N. as far as Gîzeh, and to the S. about as far as the latitude of the Pyramids of Dahshûr. The most important quarters and buildings of the city appear to have stood in the fields of the villages of Bedrashên, Mîtrahîneh, and Kaṣrîyeh.

Menes (p. cv), 'the enduring', 'the eternal', who is placed by the Egyptians at the head of all their dynasties as their first historical ruler, is said to have been the founder of the Empire, and the builder of Memphis. Herodotus states that he was told by the Egyptian priests, that Menes compelled the river, which had formerly flowed past the Libyan chain, to quit its old channel, and to run between the two ranges of hills. On the land thus reclaimed he built the city of Memphis, situated in the narrow part of Egypt. Menes erected also the great and memorable Temple of Ptah. The whole history of the city is associated with this vast sanctuary, which included within its precincts the temples of other gods, was surrounded by a wall, and must have commanded the city like a huge castle. The name Memphis is a Greek corruption of the ancient Egyptian Men-ne-fer, i.e. 'good place', or 'haven of the good'. The early Arabians corrupted it into Mumf. During the reigns of the immediate successors of Menes Memphis attained its greatest

prosperity. Each of the Pharaohs extended and embellished the temple. Memphis suffered severely from the invasion and during the domination of the Hyksos (2194-1683). The Pharaohs of the New Empire who expelled the intruders (p. cviii) resided at Thebes, the city of Ammon. During the 21st Dynasty the seat of government was transferred to Saïs (p.222), the proximity of which restored to Memphis a share of its ancient glory, though but for a short period. The city was besieged and captured several times by the Assyrians, and also by the Ethiopian Piankhi, who offered great sacrifices to Ptah in the 'City of the White Wall'. Cambyses, the first monarch of the Persian dynasty, took the city by storm after his victory at Pelusium (B.O. 525) over Psammetikh III. (the last king of the 26th Dyn.); and two centuries later it was entirely eclipsed by the foundation of Alexandria (B.C. 332), although it still retained some importance during the Roman period (B.C. 30). In consequence of the edict of Theodosius (A.D. 379-395; comp. p. cxix) the temples and statues were destroyed, and under the later Byzantine monarchs the heretical Monophysites ( $\mathbf{p}$. cxx) seem to have been very numerous here. Makaukis, the leader of the Copts, was established at Memphis while negotiating with 'Amr Ibn el-'Asi, the general of ' $O \operatorname{mar}(\mathrm{p} 13$ ). The Mohammedan conquerors transferred their residence to the right bank of the Nile (comp. p. 35), opposite the northernmost part of Memphis, using the well-hewn blocks, which had once composed the venerable palaces and temples of the ancient city of Menes, for the construction of their palaces, castles, and mosques. Memphis, however, was so vast, that it was long before its pluuderers succeeded in entirely destroying it. Down to a late period its ruins excited the admiration of all visitors. Thus 'Abdellaṭịf (at the end of the 12 th cent.), after a lively account of numerous attacks sustained by the enormous city, assures us that even in his time, the ruins contained a profusion of wonders which bewildered the mind and baffled description. On beholding the ruins he cannot help regarding as pardonable the popular belief, that the ancient Egyptians were giants of prodigious longevity, who had the power of moving masses of rock with a magician's wand. - After the time of 'Abdellaṭif the rapidly dwindling ruins of Memphis are rarely mentioned. Stone after stone was transferred as from a quarry to the opposite bank of the Nile, and we are told that the site was systematically explored by treasure-seekers, who took many centuries to exhaust its precious relics. But there is little doubt that systematic excavations would still yield a rich harvest.

The path diverging to the left from the Bedrashên embankment, and leading through the palm-grove to the village of Mît Rahîneh, brings us in a few minutes to the *Colossal Statues of Ramses II. The first of these, discovered a short time ago, is made of granite, and lies on its back on a slight eminence, so that to see the face it is necessary to climb on to its breast. The features are of the well-

Baederer's Egypt I. 3rd Ed.
known Ramses-type, which is of frequent occurrence, especially in Thebes. The helmet-crown of Upper and Lower Egypt (p. clxxix) is on the back of the head; and on both shoulders, breast, girdle, and bracelet occurs the royal cartouche with its divine variations. The cartouche on the breast is protected by Ptah (in mammy-form) on the left and by Bast (Sekhet) on the right; while that on the bracelet is surrounded by Uræus-serpents. - A stele and the torso of a double statue have also been found on this spot.

A few min. farther on we reach the hut which conceals the Second Colossus (adm. 4 pias. for those without official admissionticket, see p. 159). A wooden flight of steps asceuds to a platform from which the statue is iuspected. This huge statue was discovered by Messrs. Caviglia and Sloane (p. 143) in 1820, and presented to the British Museum, but owing to the difflculty of transport it has never been removed. It consists of remarkably hard and fine-graiued limestone, and before it was injured was about 42 ft . in height, corresponding to the measurement given by Herodotus ( 30 cubits of $11 / 2 \mathrm{ft}$. each). The workmanship is admirable. The features, which resemble the Semitic type, are exactly similar to those of this great monarch (the Sesostris of the Greeks) as portrayed on numerous other monuments, particularly at Thebes. He wears the royal head-dress (pshent) with the Uræus-snake, which is crowned with a cylinder, sloping slightly outwards and resembling the modius on the head of Serapis. An artiffcial beard is attached to the chin. On the right shoulder is a cartouche, in the centre of which is inscribed his pronomen Ra-user-ma setep en Ra, i.e. 'god of the son, mighty in the truth, approved by the sun'. The left shoulder is wanting. Round the neck is the Mena-necklace. The royal name occurs again on the breast, while the god Ptah (p. cxlviii), and the lion-headed Sekhet (Bast) stand by as bearers. These deities are repeated on the girdle, but back to back. The girdle also bears both the pronomen and the surname of Ramses, the 'favourite of Ammon', which is also inscribed on the front of the scroll or staff which he holds in his left hand. There are several other hieroglyphic inscriptions, which cannot, however, be seen in the present position of the statue. - There can be no doubt that these statues are the two mentioned by Herodotus as having been erected by Ramses II., the Sesostris of the Greeks, in front of the temple of Ptah (p. 160) at Memphis, after his victories over the peoples of the E. In the time of Strabo one only was standing in the anterior court of an arena which was used for bull-fights, for by that time the glory of Memphis had departed.

In a number of hollows near these colossal statues, we observe remains of foundations, the most important of which are 5 min . to the N.W., beyond the projecting angle of the palm-grove, and due E. from the village of Mît Rahîneh. Mariette supposed these to be the foundation of a temple of Ptah (Vulcan). During the inundation
the whole of the low ground is under water, and then resembles a lake surrounded by palm-groves.

In 1851-54 Hekekyan Bey, an Armenian, was employed by the London Geological Society to make excavations here; and having sunk shafts at 96 different places, he found bones of domestic animals, fragments of pottery and bricks, and various implements (e.g. a copper knife), at different depths. Near the colossal statues, beneath strata of Nile-mud, which had not been covered with sand from the desert, was discovered a fragment of red terracotta, at a depth of 39 ft . The alluvial deposits at this spot are calculated, though on a not very trustworthy system, to have increased at the rate of $23 / 4-3 \mathrm{in}$. in each century, which would make this fragment of pottery, buried at a depth of 39 ft ., at least 4000 years older than the monament of the great Ramses.

From Mît Rahîneh (Memphis) to Saklâra. (1) Spring Route. We ride towards the $W$. from the statue of Ramses, leaving the village of Mît Rahîneh at a little distance to the right (see Maps, pp. 160, 164). On quitting the palm-grove we obtain an interesting view ; immediately to the right, shaded by palm-trees and lebbeks, is a small villa belonging to Tigran Bey, a nephew of Nubar Pasha. About 1 M. to the W. is another long palm-grove surrounding Sakṭâra and bordering the desert; beyond this, on the yellow sand of the desert, rise eleven pyramids. The first of these, to the left, is the outer mud-pyramid, beyond which are the blunted pyramid, the first mud-pyramid, and the great pyramid, all belonging to the group of Dahshûr (p. 187). Not far from these we next perceive the Mastaba Far'ûn, with the pyramid of Pepi II.; then, exactly above the houses of Sakkâra, two pyramids, the lesser of which is that of Pepi I.; and, lastly, to the right, the pyramid of Unas, the great step-pyramid, and two smaller ones (to the right, that of Teta). These last eight pyramids belong to the group of Sakkâra. - Having nearly reached ( $3 / 4 \mathrm{hr}$. from the statues of Ramses) Sakkâra, we leave the village, which is uninteresting, to the left, turn towards the N., and skirt the palm-groves. (At the end of these, on the left, are a beautiful, shady sycamore, close to a spring of good water, and the tomb of a shêkh.) We now reach the margin of the desert, where we join the winter-route.
(2) Winter Route. During the period of the inundation, after having visited the statues of Ramses, we return to the ( 5 min.) end of the embankment (see p. 160), which leads back to Bedrashên, and then turn to the N . and traverse the whole of the plantation, until we reach another embankment which winds across the plain towards the W., and is interrupted by two bridges. Distance from the statues of Ramses to the 1 st bridge 20 min .; thence to the second bridge $1 / 4 \mathrm{hr}$. In 20 min . more we reach the margin of the desert at the site of an old village (now unrecognizable; marked 'Remains of a house in crude brick' on the map) where the spring and winterroutes unite. - Of recent years a short-cut through the fields is frequently taken after Jan., which joins the old winter-route near the bridge.

The united two routes ascend to the plateau, and bring us in sight of the great **Necropolis of Sakkara, which extends about 7700 yds . in length from N. to S., and $550-1600 \mathrm{yds}$. in width from E. to W. It contains sepulchral monuments of every kind, from the pyramid to the rock-hewn cavern, dating both from the ancient and the later empire. Many of the recent excavations are now covered with loose heaps of light-coloured sand. The whole of the Necropolis has been repeatedly explored both by the Byzantines and the Khalifs, as well as by modern explorers. Many generations have been enriched by its treasures, and yet an immense profusion of relics was still left to be discovered in the last few decades. It is nevertheless probable that this mine of antiquities, which has so marvellously preserved everything committed to its keeping, is still far from being exhausted.

Ancient writers have recorded many interesting facts regarding the Necropolis of Memphis, and have mentioned various parts of it by name. The Pyramids, eleven in number, have indeed been identifled, and the Serapeum has been excavated, but all trace of many other features have been irrevocably lost. Who, for example, can tell where now to look for the sacred lake across which the mummy of Apis was conveyed by boat; or the beautiful pastures near it, which were once compared with Homer's asphodel meadows; or the temple of the gloomy Hecate, and the gates of Cocytus and of Truth; or the site of the statue of Justice without a head; or the multitude of sacred and profane buildings mentioned by the later Greek papyri as having belonged to this burial-ground?

Two routes to Mariette's House, which is 20 min . distant, are shown on the map. That to the right passes several unimportant pyramids, with the so-called Cemetery of the Cats, where numerous mummies of cats and ibises were found, to the extreme right. Nothing is to be seen here, as the tombs are now closed, being considered dangerous. The whole of the soil of the Necropolis is indeed so honey-combed with tombs that great caution should be used in traversing it. Some of the open shafts are no less than 50 ft . in depth. - The route to the left, leading straight towards the Step Pyramid, is preferable. The outside of the Pyramid may be inspected as we pass; it is seldom climbed, as the stone of which it is composed is too friable.

The *Step Pyramid of Sakḳ̂̀ra (Arab. El-Haram el-Medarraga, i.e. 'provided with steps'), a very conspicuous feature in the landscape, may be regarded as the 'Cognisance of Sakkâra'. It was the tomb of the mythical king Zoser (3rd Dynasty), and is the oldest historical monument in Egypt which has come down to our days. The pyramid consists of six stages, the lowest of which is about $373 / 4 \mathrm{ft}$. in height, the next 36 ft ., the third $341 / 2 \mathrm{ft}$., the fourth $323 / 4 \mathrm{ft}$., the fifth 31 ft ., and the sixth $291 / 3 \mathrm{ft}$., while each stage is about $6 \frac{1}{2} \mathrm{ft}$. in width. The perpendicular height is 196 ft . The


Step Pyramid of Sakkêra (South East Side.)


Interior of the Apis Tombs.
(Principal Passage.)
original entrance was on the $N$. side, at the foot of the lowest step. The nucleus of the pyramid consists of inferior stone quarried in the neighbourhood. The peculiarity of the pyramid consists in the facts that it does not stand like all the others exactly facing the principal points of the compass, that the area it covers is oblong instead of square (N. and S. sides 354 ft ., E. and W. sides 398 ft .), and in particular that it contains a very numerous and complicated series of passages and chambers in the interior, which were explored by General Minutoli in 1821. The latter were due to treasure-hunters, who, long after the interment of Zoser, entered the pyramid by separate shafts and destroyed the tomb-chamber; at a later period, new rooms were constructed (perhaps by a king of the 26th Dyn.) for the reception of the royal remains. To this last construction belonged two small chambers, the walls of wich were inlaid with small bluishgreen tiles of fayence. Subsequently the corridors of the pyramid were used for the burial of private persons (Col. Vyse found sixty mummies in the interior), and new shafts were probably added. A richly gilded skull and gilded soles of feet (belonging to King Zoser), together with other interesting relics found here by Minutoli, were unfortunately lost at the mouth of the Elbe. The door of one of the later chambers with its architrave of white limestone covered with hieroglyphics, and the door-posts formed of somewhat rough blocks of limestone and green glazed tiles, were removed by Lepsius in 1845 to the museum at Berlin. The pyramid may be ascended with the help of the Beduins, but the view from the summit is very inferior to that from the Pyramid of Cheops ( $p .145$ ).

About 300 paces to the S.W. of the Step Pyramid is the Pyramid of King Unas, which may be inspected on the return, if time permit. It was opened in 1881 and has been now provided with an iron gate. The entrance to the sepulchral chamber was found closed by three doors of granite; and it required the expenditure of a vast amount of labour to remove these obstacles. The interior contains two large chambers and a smaller one, the former with a lofty pointed roof, the latter with a low and flat roof. The two large chambers contain numerous funereal inscriptions, most of them well preserved. The granite sarcophagus of the king, who was a mefmber of the 5th Dynasty, stands in the second chamber, close to the wall. The three walls enclosing it are of oriental alabaster and are adorned with brightly coloured paintings. The stone beams of the ceilings do not rest on the side-walls, but are separated from them by a considerable interval, thus relieving them of an immense pressure (comp. p. 147).

Beyond the Step Pyramid, as we continue on our way to Mariette's House, a striking view opens towards the N . In the foreground lies the green valley of the Nile, bordered by palm-trees, and framed on both sides with the yellowish-grey desert; and we also observe the alabaster mosque of Mọ̣ammed 'Ali at Cairo. On
the left tower the three pyramids of Gîzeh, 9 M . distant, and the three nearer pyramids of Abuṣir. The path turns to the right beyond the next heap of rubbish (N.W.), crosses the hollow, and soon reaches -

Mariette's House. Mariette, the famous French Egyptologist, first rose into notice by his discovery of the Apis Tombs in 1851 ; and from 1858 till his death in 1881 was director of the official excavations in Egypt. Strangers are quite at liberty to enter and use the broad covered terrace in front of the house, but for any very protracted occupation of it the permission of the museum authorities should be obtained. No charge is made for admission to the terrace, but it is usual to give a fee of $21 / 2$ pias. or more, according to the number of the party, to the Beduins who take charge of the house, and who are much better conducted than their rapacious brethren of Gîzeh. A guide to the tombs must be taken at Mariette's House, as visitors are not admitted to them nattended. (Bakshîsh for the tombs of Apis and Ti, 8-10 pias., which will probably also admit to the tomb of Mera, mentioned at p. 185). Travellers should bring a wrap for use on emerging, since the temperature in the tombs is higher than that of the outside air.

Standing on the terrace of Mariette's House, we observe, immediately to the N., a sandy hollow, from which rise several heaps of stone and hillocks of sand. These mounds mark the site of the statues of the Graco-Egyptian period, standing on the walls which flanked the approach (Dromos) from the Egyptian Serapeum or Mausoleum of Apis to the Greek Serapeum ( to the E.). The statues (including a marble Cerberus in the form of a lion with its tail terminating in a snake's head) are in a very mutilated condition, and have been purposely covered with sand (like many of the tombs) to preserve them from the influence of the air and the rapacity of relic-hunters. With the dromos was connected a Sphinx Avenue. The whole of the area was excavated and explored by Mariette, who in 1850 found a number of sphinxes from Sakkâra in private gardens, and was thus led to conjecture that they belonged to the Serapis Temple mentioned by Strabo and in several Greek papyri. No trace now remains either of the Egyptian Serapeum, which seems to have been built in the usual form of Egyptian temples, with pylons, anterior court, etc., or of the Greek Serapeum, which was a temple 'in antis'. In the latter eleven statues of Greek philosophers and poets, and thousands of votive bronze statuettes were found, all of which are now in the Louvre.

The Worship of Apis (p. cxlviii), $i$ e. of the sacred bull in its temple (Apieum) at Memphis is said to date back as far as the 2nd Dynasty. The ancient Egyptians believed that like the soul of men, the spirit of the deceased bull also was united with Osiris and became the Osiris Apis ( Asar-Hapi). The carcase was embalmed and solemnly interred in a special vault. The Egyptians at first resisted the introduction of the worship of Serapis by the Ptolemies, until the priests, pointing to the similarity of the names, declared that in Serapis they recognized the Osiris Apis in his life beyond the grave.

Within the extensive chambers of the Serapenm there was also established a colony of hermits, who lived in the strictest seclnsion in small cells attached to the varions chapels of the temple, and snbsisted entirely on food bronght to them by their relatives. They were not permitted to leave their cells, and a kind of air-hole formed their sole channel of commnnication with the onter world. There is no doubt that these were the prototypes of the Christian monks and ascetics of a later period. The first Christian hermits ( $\varepsilon \neq \chi \varepsilon \chi \lambda \varepsilon \iota \sigma \mu \varepsilon^{\prime} y o t$ ) are also said to have received their food throngh the air-holes of their cells, and to have chiefly aimed at attaining to a condition of a $\alpha^{\alpha} \dot{\vartheta} \varepsilon \iota \alpha$, or $g^{*} \alpha d u s$ impatibilitatis (i.e. insensibility to external impressions). - The Christian monastic and ascetic orders are said to have been founded by SS. Panl and Anthony of Thebes, but there is no snfficient historical fonndation for the statement (pp. cxviii, 237).

A trodden path leads from Mariette's House, to the N.W., in 2 min. to the ${ }^{* *}$ Apis Tombs, the subterranean part of the Egyptian Serapeum, hewn in the rock, where the Apis bulls were interred. The entrance has been closed since 1869 with a gate, which is opened by the guide. From the inscriptions found here, about 300 in number, it was ascertained that the bulls were interred in different ways at different periods of Egyptian history. No Apis sarcophagus dating from the primæval monarchy was discovered, and it would seem that the first placed here dates from the reign of Amenophis III. (18th Dynasty). On the surface above, a chapel was erected in honour of each bull, while his remains were deposited in one of the square chambers hewn in the rock, to which a sloping passage descended from the chapel. No trace of these chapels now remains. Every Apis was interred in this way down to the thirtieth year of the reign of Ramses II. (19th Dynasty), after which the vaults began to take a different form. A subterranean gallery, about 110 yds . in length, was now hewn in the rock, and flanked with rudely excavated chambers, forty in number, which were walled up after having received the remains of the sacred bull. This was done down to the twentieth year of the reign of Psammetikh I., the first king of the 26th Dynasty, when four of the Apis vaults fell in, and another site was chosen for a new series of tombs. In the thirty-third year of that king's reign a new gallery, flanked as before with vaults, was accordingly excavated for the purpose. These vaults, which were extended at intervals down to the time of the last of the Ptolemies and are much more carefully constructed than the two series of earlier date, are still accessible, while the others have long since been filled up. The passages now open to visitors have an aggregate length of 380 yds . and are about 10 ft . in width and $171 / 2 \mathrm{ft}$. in height.

Passing through the Gateway (Pl. a), we enter a Chamber (Pl. b) of considerable dimensions, with niches of various sizes in the bare limestone walls, where votive tablets of the kind mentioned above were once placed. Visitors light their candles here. The guide now proceeds towards the right. After a few paces we observe at our feet a huge block of black granite (Pl. c), which once formed the lid of a sarcophagus. Beyond it we turn to the left, and after ten paces
reach an enormous granite sarcophagus ( $\mathrm{Pl} . d$ ), which so nearly fills the passage that there is only just room to pass it on its right side. The lid and the sarcophagus belong to each other, having doubtless been executed for the reception of one of the sacred bulls, but were probably stopped here on their way
 to the vault for which they were destined, in consequence of the crisis in Egypt's history which caused the overthrow of the worship of Apis. Beyond this sarcophagus we continue to proceed towards the W. between bare walls of rock, and then turn to the left (S.) into another passage destitute of ornament. This leads us to the -

Principal Passage (Pl. A, B), running parallel with the first, from E. to W., and penetrating the solid rock. This passage is flanked with the side-chambers, about 26 ft . in height, the pavements and vaulted ceilings of which are constructed of excellent Mokaṭtam stone. Twenty-four of the chambers still contain the huge sarcophagi in which the Apis mummies were deposited. These monster coffins each consist of a single block of black or red polished granite or of limestone, and average 13 ft . in length, 7 ft . in width, and 11 ft . in height, and no less than 65 tons in weight. The covers, five of which are composed of separate pieces of stone cemented together, have in several instances been pushed on one side, and on the top of some of them the Arabs, for some unexplained reason, have built rude masses of masoury. All the sarcophagi, when discovered by Mariette, had been emptied of their contents, with the exception of two, which still contained a number of trinkets. Only three of the sarcophagi bear inscriptions, briefly recording the name of the king by whom they were erected. One of the finest (Pl. e; to the right near the $W$. end of the passage), of black granite, with admirably executed hieroglyphics on its polished exterior, bears the name of Amasis (the last king but one of the

26th Dynasty) ; it may be entered by means of a ladder. Another bears the name of Cambyses, and a third that of Khabbash (p. cxiii), a king of the house of the Saïtes, who gained possession of the throne during the reign of Darius and occupied it until the second year of Xerxes. The cartouches on a fourth sarcophagus, dating from one of the later Ptolemies, are empty. The most instructive relics found here were the 'Apis Steles', orsmall stone votive tablets presented by pilgrims to the shrine of the bull last interred, and which, it is said, could only be received within seventy days of the sacred animal's death. Specially favoured persons, however, were permitted to place Statuettes, bearing inscriptions similar to those on the steles, even after that period. These tablets have yielded most valuable information as to the ancient Egyptian mode of reckoning time, and particularly regarding the later pe-
 riods of Egyptian history, as they record the days, months, and years of the king's reign on which the Apis revered by the donor was born, enthroned, and interred respectively. We have thus been enabled to determine with precision the duration of the reigns of many of the Pharaohs and the order in which they succeeded each other. A few of these relics may be seen in the Gîzeh Museum (p. 120), but most of them are now in the Louvre. If the ceremonies which accompanied the obsequies of the Apis bulls were as magnificent as the sarcophagi were costly, Diodorus probably does not exaggerate when he informs us that the chief priest of an Apis bull which died of old age shortly after the accession of Ptolemy Lagi expended on its burial not only the whole of a large sum then in the coffers of the temple, but a farther sum of fifty talents of silver (about 11,700l.) advanced by the king. Diodorus also assures us that in his time the keeper of Apis (whose office was doubtless a very honourable one) spent no less than a hundred talents on the obsequies of a bull.

Near the E . end of the principal passage, we reach a side-passage (Pl. $f$ ) diverging to the right, from which another passage leads to the right, in a direction parallel with the main corridor, but now built up, as it was in a dangerous condition. Opposite, we pass over another sarcophagus by means of steps ( $\mathrm{Pl} . \mathrm{g}$ ) and thus regain
the door by which we entered the vaults. The temperature in these subterranean chambers, to which the outer air has little or no access, is always about $79^{\circ}$ Fahr., that being the mean temperature of Cairo.

Before taking our leave of this extraordinary place, we may quote the interesting words of its discoverer: -
'I confess', says Mariette, 'that when I penetrated for the first time, on 12th Nov., 1851 , into the Apis vaults, I was so profoundly struck with astonishment that the feeling is still fresh in my mind, although five years have elapsed since then. Owing to some chance which it is diffcult to account for, a chamber which had been walled np in the thirtieth year of the reign of Ramses II. had escaped the notice of the plunderers of the vanlts, and I was so fortnnate as to find it untouched. Althongh 3700 years had elapsed since it was closed, everything in the chamber seemed to be precisely in its original condition. The finger-marks of the Egyptian who had inserted the last stone in the wall built to conceal the doorway were still recognisable on the lime. There were also the marks of naked feet imprinted on the sand which lay in one corner of the tombchamber. Everything was in its original condition in this tomb, where the embalmed remains of the bnll had lain nodistarbed for thirty-seven centuries. Many travellers would think it terrible to live here alone in the desert for a nnmber of years; but such discoveries as that of the chamber of Ramses II. produce impressions compared with which everything else sinks into insignificance, and which one constantly desires to renew'.

Next to the Apis Tombs, the Maștaba of Ti (p.173) is the most interesting point at Sakkâra. It lies about 260 paces to the N.E. of Mariette's house, in an old street of tombs, now covered op; and the surface of the soil has been so raised with deposits of the sand of the desert that the tomb rather resembles a subterranean rockstructure than a building on the surface of the earth.

The Mastaba (literally in Arabic, 'bench') of Egypt is a mausoleum of solid masonry constructed on the surface of the earth. Its form is usually rectangular, and the walls slope inwards, so that the whole structure forms a kind of low truncated pyramid. Many of them are built of limestone-blocks of moderate size, and others of Nile-bricks. While the pyramids are always entered from the N., the door of the Mastaba is usually on the E. side. On the stonedoor-posts generally rests the drum, a cylindrical block of stone, probably in imitation of the round section of a palm trunk, such as still usually covers the doorways of huts built of Nile-mud or sun-dried bricks. The drum usually bears the name of the deceased, but rarely his titles, which are often very lengthy. Grand-children and other near relations of the Pharaohs, however, are distinguished by the

suten rekh added to their names, being a title of honour which might be translated - 'of the blood-royal'. The door-posts occasionally bear a full-length representation of the deceased; and, where there is no drum, the architrave of the door sometimes bears an inscription. The arrangements of the interior vary. At the back of the principal chamber there is usually a monument with

## PYRAMIDS and TOMBS of SAKKARA

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numerous inscriptions, giving the whole of the titles of the deceased, the names of his nearest relatives, and a number of prayers, generally addressed to Anubis, the guide of souls in the infernal regions and the tutelary god of the realms of the dead. In front of these monuments, and in presence of the family, it was usual for the priests appointed for the purpose to perform the rites due to the manes of the deceased (p. clxi). Near the principal chamber there is generally a niche closed with masonry, to which Mariette gave the name of serdâb ('hollow space'), and which in many of the mastabas either contains, or formerly contained, a statue of the deceased. Most of the serdàbs are entirely closed, but some of them have small openings in the wall, through which it was probably customary to introduce incense. The well, or perpendicular shaft into which the body of the deceased was sunk, is usually on the W. side of the Mastaba; for it was in the direction of the setting sun that his soul would cross the threshold of the next world. The sarcophagus is usually an oblong stone box with a flat lid, containing a wooden coffin tapering towards the feet, with a human face represented on it at the head. Within this coffin was placed the body, either wrapped in a cloth, or without any covering. There is here no trace of the careful mummifying process of a later age. The ornamentation of the interior of the mastabas is very rich. The first chamber usually contains well-executed bas-reliefs, mostly coloured, of members of the family of the deceased, and short inscriptions in the simple hieroglyphics of that period, with their scanty determinative symbols, recording the dignities of the deceased, and mentioning the estates from which his faithful servants have brought offerings to the manes of their master. Other chambers contain carefully arranged lists of the appropriate offerings to be presented to the deceased at different seasons, and on the various festivals, such as meat and poultry, vegetables and fruit, drinks and essences; and adjoining these are represented the altars laden with these gifts. Osiris is rarely mentioned by the inscriptions, and death or the future life is hardly ever alluded to; but there are generally faithful representations of the favourite pursuits of the deceased (bird-catching, fishing, etc.), of his most valuable possessions (herds of cattle, ships, etc. ; but curiously enough, neither camels, sheep, nor horses, which last seem to have been introduced by the Hyksos), and the tasks performed by his servants (agricultural operations, viutage, carpentering, glass-blowing, gold-washing, papyrus-gathering, writing, etc.). These coloured bas-reliefs form a most interesting link in the history of ancient art, and are not without æsthetic attraction also. They constitute, as it were, a picture-book in stone, illustrative of the manners and customs which prevailed during the earliest known stage of human civilisation.
'If we enquire into the motives of these primordial inhabitants of the Nile Valley in decorating the walls of their tombs with these curious scenes, it would appear that they intended to hand down to posterity a
record of the earliest achievements of mankind in the province of art and civilisation. Having hardly emerged from the simplicity of the primæval condition, they seem to have been proud of displaying the results of their peaceful conquests over the animate and inanimate world around them, and to have been desirous of informing posterity of these triumphs. At that remote epoch, to behold was to admire. The chief occupation of the period was apparently to embellish the tombs in the best possible manner, and it is these decorations which constitute the pictorial history of primitive Egypt'. - Brugsch.

These tombs probably originated somewhat in the following manner. Every Egyptian of moderate means, and particularly the great and wealthy, began during his lifetime to plan the construction of a tomb worthy of his position in society. The longer he lived and the wealthier he became, the handsomer and the more spacious was the structure. When the architect had lined the interior with smoothly hewn stones from the quarries of Turra, the task of the draughtsman and the decorator began. In accordance with certain rules regarding the objects to be represented and their grouping, which seem to have been followed in all the tombs of a similar kind, or perhaps according to well-deflned patterns, the draughtsman first proceeded to divide the walls into sections of different sizes, and sometimes into regular squares, with red chalk, and then to fill them up with sketches of the representations and the hieroglyphics with which the tomb was to be adorned. The stone-mason then converted these sketches with his chisel into relief figures, some of which were flat, while others were raised about $21 / 2$ lines or more. Lastly the painter coloured these designs, the most conspicuous tints being black, reddish brown, pale brown, yellow, light and dark blue, and green. Parts of the design that were intended to be white were not painted, but left in the natural colour of the stone. All the colours, so far as they have been chemically analysed, are earthy substances, and are beautifully preserved, except in cases where they have been too long exposed to the sun and wind. The women are always painted of a pale yellow colour, and the men of a reddish brown tint. The metals also have their conventional colours, iron being blue, and bronze yellow or red, while wood is painted brown, or, when in logs, greenish grey. In painting animals the artists endeavoured to imitate their natural colours, and we accordingly find that the cows and calves are black, brown, and dappled. - On the death of the proprietor of the tomb, his remains were deposited at the bottom of the mummy-shaft, and the task of decorating the tomb was at an end, so that the most perfect sculptures are to be seen in juxtaposition with the mere designs in red chalk. If other members of the family died, their mummies were likewise deposited in the common shaft, but no allusion to their history was recorded on the walls of the principal chamber. An exception, however, was made in the case of the widow of the deceased, whose statue was placed on the W. side of the tomb-chamber beside that of her husband, as has
been done in the tomb of Ti . It is also worthy of remark that the name of the proprietor of the tomb is always engraved in hieroglyphics on the so-called drum of the doorway and on that of a 'stele' fashioned in imitation of a door on the $W$. side of the tomb (as in the case of the tomb of Ti , see below). In a number of the tombs it has been observed that a single figure has been obliterated, while the whole of the rest of the decorations are well preserved and intact. The flgures thus defaced are supposed to have been those of dishonest servants, whose misconduct induced the family to erase their portraits. At stated intervals, on holidays, and probably also on the anniversary of the death of the occupant of the tomb, the family was wont to assemble in the decorated tomb-chamber and the anterior court, bringing offerings of food which they consumed in honour of the deceased, while homage was done to the statue by burning incense around it.

The **Mastaba of $\mathbf{T i}$ is the best preserved monument of this kind. Very little of the exterior is now visible, but the interior, which has been completely excavated, is executed with the utmost care, and the sculptures on the walls exhibit a skill which is truly marvellous when it is remembered that the mausoleum was erected in the 5th Dynasty, in the time of the builders of the pyramids of Abuṣir, that is, about 4500 years ago. Both the paintings and the hieroglyphics which cover the walls are executed in remarkably delicate and flat bas-relief, the outlines being sharp and distinct, while the projecting parts are at the same time subdued and harmonious. The hieratic canon (p. clxvii) has already imparted to the human figures a somewhat conventional type, notwithstanding their spirited action, but there is a refreshing fldelity to nature in the attempts of the artists to represent animals. The painting is preserved at places. Each of the larger scenes is presided over by the commanding figure of Ti himself, the proprietor of the tomb, who is easily distinguishable by his loftier stature. He wears a wig with the usual locks, and his features were copied from life, as is proved by their resemblance to those of his statue now preserved at Gîzeh (p. 99). In some cases his chin is prolonged by a small false beard. Aronnd his loins he wears a kind of apron, and from his neck hangs a broad necklace. With one hand he leans on a long staff, and in the other he holds his baton of offlce. Ti (hieroglyphic 4 ), as the inscriptions in the tomb-chamber inform us (p. 180), was a dignitary of the highest rank in the service of Ra-nefer-ar-ka, Ra-enuser, and Kaka, monarchs of the 5th Dynasty. He was a 'semer' (companion, adjutant, or chamberlain) of the king, 'enthroned in the heart of his lord', a 'master of the secrets' (privy counsellor), 'loving his sovereign', a 'president of the gate of the palace', a 'secret counsellor of the king in all his royal assemblies', a 'secret
counsellor for the execution of the commands of the king', and a 'president of all the royal works and the royal department of writing'. He also held a high sacerdotal office at the pyramids of Abusîr (p. 158), and he is elsewhere called one of the chiefs of the prophets, a president of the sacrifices and purifications, and a guardian of the mystery of the divine speech. His wife Nefer-hotep-s, who is frequently represented by his side, was a member of the royal family, but he himself was a man of humble parentage, who had risen to distinction by his merit. His sons Ti and Tamut
 (Tamuz) enjoyed the title of princes in consequence of the high rank of their mother. Like other Egyptian ladies of distinction, the wife of Ti is termed the 'beloved of her husband', the 'mistress of the house', and the 'palm of amiability towards her husband'.

Of the three Entrances (Pl. A) that in the centre is alone used, the others being built up. We first enter the small anterior Court (Pl. B), which contains two pillars, restored in modern times. On the E. wall (Pl.a) are represented the offering of gifts; the other pictures have entirely faded from exposure. On the front-walls of the entrance, on each side of it, is a figure of Ti (see p. 173), above which are mutilated hieroglyphics mentioning several of his titles.

We next enter the Great Court (Pl. C), an extensive quadrangle, with a modern roof borne by fourteen freely restored square pillars. This hall is said to have been the scene of the rites performed in honour of the deceased and the sacriflce of victims. In the centre of the court is sunk the mummy shaft (Pl. $d$ ), by which we may descend to a low subterranean passage extending the whole length of the building, and leading first to a kind of vestibule and then to the tomb-chamber of $\mathrm{Ti}(\mathrm{Pl}, \boldsymbol{H})$. The sarcophagus completely fills the niche in which it stands, so that only the front of it can be seen. - The Wall Paintings in the great court deserve no long examination; they are much injured by exposure and some have altogether faded. On the N. side (Pl. e) was formerly represented the sacrifice of cattle, shown in the wood-cut below. The inscription above this scene informed us that the young bull sacrificed here would, 'according to the judgment of the man
skilled in slaughtering', yield 50 men, or pots (probably of fat). $\dagger$ Behind the wall here is another chamber ('Serdâb' ; Pl. D; p. 171).


On the E. side (Pl. $f$ ) all that remains is a strip about $21 / 2 \mathrm{ft}$. in length. The details of the scenes on the W. side can hardly now be

made out. Close to the entrance, on this wall (Pl.g), is the very interesting scene of the feeding of the geese (showing that the ancient Egyptians were acquainted with the modern modes of fattening poultry), and also that of the 'feeding of the cranes'. We next observe(Pl.h)a complete


[^37]poultry-yard, with geese, pigeons, and cranes, which are being fed with corn. The figure of Ti occurs twice (PI. $i$ and $l$ ), once with only the upper half, once with only the lower half, preserved.

The door in the corner, which is unlocked by the guide, admits to a Corridor (PI. E), in which the wall-paintings are in better preservation. On each side are several series of bearers of offerings (comp. p. 171), one above the other. On the right is a niche $91 / 4 \mathrm{ft}$. high and 6 ft . wide, containing a 'stele' dedicated to the wife of Ti. On the left, on the inner part of the pillar of the doorway, is Ti with his titles; then (between the first and second doors) the transport of the statue of Ti and persons offering incense. Hieroglyphics in different places inform us that 'this is the statue in thorn-acacia wood of the deceased Ti', and 'this is the statue in ebony, which they are drawing'; 'the drawing of the statue is a good drawing'. - 'The servants pour out water' is the inscription at the place where a servant is wetting the runners of the sledge which bears the statue. - On the right (between the niche and the second door) are several more rows of gift-bearers. On the door-posts (left) two male figures and (right) Ti with his titles. Over the door (N. side) musicians and dancers, and (S. side) Ti in a boat (damaged). - We then come to a door on the right, leading into an oblong, covered, and therefore somewhat dark chamber (Pl. $F$ ), the scenes adorning which afford us an insight into the domestic economy of the deceased. Among them are represented a complete pottery and a bakehouse, and numerous vessels of various forms, destined for different uses. On the upper part of the left door-post of this chamber a piece of the sycamore wood to which the door was attached is still in its place. - Above, on each side of the door of this chamber (on the $E$. side of the corridor), are several barges, some of which are light boats with a number of rowers with broad, shovel-shaped oars, while others of heavier build have lateen sails and are also steered with oars. In the bow of the vessel stands a man with a long pole used for sounding, in the same way as is done at the present day. These boats are conveying retainers of the deceased to Sakkâra to pay homage to his remains; for we read beside one of the sailingboats: - 'Arrival from the N. country, from the villages of the family estate, in order that they may behold the chamberlain who is perfect in consequence of his distinction in occupying the first place in the heart of his sovereign, and the master of the mystery of the kingdom of the dead, Ti'. The captain of the vessel, of which we annex a woodcut, wishing to land on the $W$. bank, is represented as giving the command - 'Direction, starboard, starboard!'

Leaving the corridor, we pass through the door opening to the S . (with a figure of Ti on each side), and enter the Tomb Chamber (Pl. G) itself, $223 / 4 \mathrm{ft}$. broad, $233 / 4 \mathrm{ft}$. long, and $121 / 2 \mathrm{ft}$. in height, and embellished with special care. The ceiling, in imitation of
palm-stems, rests on two massive square pillars, coated with stucco 'and coloured to imitate red granite, and has two openings on the $\mathbf{E}$. side through which light was introduced. The pictorial ornament here is unusually rich and will repay careful examination.

On the $E$. side (to the left of the entrance) are six series of harvest scenes, representing the reaping, storing, and transport of the corn, the treading of it out by oxen or asses, the separation of

the straw from the grain by means of three-pronged forks, the sifting of the grain, and the filling of the sacks, which last operation is done by women. The dress of the female workers is represented as fitting tightly, leaving the form of their figures well-defined. All seem intent on their occupations, the scenes are full of life and spirit, and the imaginative artists have even credited the dumb creation with intelligence. The reaper says to the ears - 'Ye are seasonable',
or 'ye are now large'; and at another place he is made to say - 'this is reaping; when a man does this work he becomes gentle, and so


I am'. The driver of a herd of donkeys addresses them with 'people love those who go on quickly, but strike the lazy'; 'if thou

couldst but see thy own conduct!' Gleaners of the remains (sep) left by the. reapers are also represented.

In the centre of this wall is a half-mutilated representation of Ti To the right of it are two perfectly preserved and several dam-

aged ship-building scenes, representing the various operations, from the hewing of the stems to the caulking of the vessel resting on the stocks. The primitive saws, axes, hammers, drills, and other tools used by the workmen are particularly interesting.
S. Side of the Tomb Chamber of Ti.


The S. side is richly covered with representations, butifithe pupper parts are damaged. We here find lists of the whole of the domestic animals belonging to the deceased, including oxen, gazelles, and

antelopes, which were domesticated at that period, and a stag, which is separately noted by the writers. There are no camels, nor horses (comp. p. 171). Then figures of Ti and bearers of offerings.

On the lower half of the wall are four rows of workmen of different trades, including carpenters, masons, sculptors, glass-blowers, chairmakers, leather-workers, and water-bearers. To the right of these, at the bottom, are geese, ducks, pigeons, and cranes; above which are oxen, and then a scene in a court of justice, consisting of a number of judges writing, before whom several criminals are being dragged.


To the right' of the last scene fare several figures bearing offerings, and below these is represented the slaughtering of various animals.

Behind this wall is concealed another Serdâb (Pl. H), in which several broken and one complete statue of Ti were found, but none of his wife.

On the W. side of the tomb-chamber are two large 'steles', extracts of the contents of which have already been given (p. 173). These inscriptions also contain an invocation of Anubis, the jackalheaded guardian of the infernal regions, who is to take the deceased under his protection. In front of the left stele is a slab for the reception of offerings ( p .171 ), of the kind which occurs in every tomb. In the centre of the wall are slaughterers and the presentation of gifts (damaged). In front of these stood statues of Ti and his wife (p. 99).


The ${ }^{* *}$ North Side of the chamber is adorned with the most elaborate and best preserved scenes. The lowest of these consists of a long procession of 36 female figures (of a pale yellowish colour, see p. 172), bearing on their heads large baskets filled with various kinds of agricultural produce, bottles, jars, and loaves, carrying poultry in their hands (and in one case a porcupine in a cage), and leading cattle by ropes. The inscription above them records that this is an - 'Offering of sacrificial drink and food from the villages of the family estate of the chamberlain Ti situated in Lower and Upper Egypt'. Adjoining each figure is the name of the place which it represents. Each name is accompanied by that of Ti, the proprietor, and the order is in accordance with the most valued products, the industries, and the situation of the place represented. Thus we observe a Water-drawing Ti (probably so call-

ed from its irrigation system), a Field Ti, a Palm Ti, a Ship Ti, an Island Ti , a Sycamore Ti , a Bread Ti , and a Cake Ti.

Above these are rustic cattle scenes. A cow is represented calving, and another is being milked, while an overseer, apparently

tired with doing nothing leans on his staff and orders the servants to - 'milk while you hold fast the young calf by the knees'. T'o the right of these are a number of frisky young calves, tethered to blocks of wood, and browsing or skipping about. Near the left angle we observe a dwarf leading an ape, resembling the longtailed monkeys of the Sûdân, and a man with a deformed shoulder
with a couple of prick-eared greyhounds, of the kind known in N. Africa as 'slughi' (p. 185).

Higher up (comp. Plan, p. 180) we observe scenes representing the snaring of birds and the catching of fish in nets and baskets; and we here read the list of the hieroglyphic inscriptions - 'Let

what is in it fall down', and 'the emptying of the receptacle formed of rushes.

To the right, towards the door, is a large and striking tableau, representing ${ }^{* *}$ Ti engaged in hippopotamus hunting. He stands in a light papyrus boat, leaning on a staff, and is more than double the size of his attendants. The hunting of crocodiles and hippopotami on the Nile formed a favourite pastime of the wealthy Egyptians, and we find scenes of this kind recurring frequently, especially in the burial chapels of the earliest period of the Egyptian monarchy. The bearing of Ti is calm and dignified, while the captain of the vessel, 'the chief over the people of the bird-pond Atet', seems to be attending to the directions of his master with a view to communicate them to the crew. In the foremost vessel three of the men are engaged in securing two aquatic monsters floundering in the water, one of which has been caught with a kind of snare and is threatened with the spears of the hunters. An allusion to this kind of hunting is said to be contained in the following passage in the Book of Job (xli. 1,2): - 'Canst thou draw out leviathan with an hook? or his tongue with a cord which thou lettest down? Canst thou put an hook into his nose? or bore his jaw through with a thorn?' - The other hippopotamus which the men are endeavouring to secure has a small crocodile in its mouth. At the stern of Ti's vessel is a smaller boat containing a boy, who is about to strike on the head a silurus which he has caught. The other fish represented in the water are so faithfully drawn that the species to which they belong are easily determined. The three boats are surrounded by papyrus plants, among the tops of which various birds are sitting on their nests or fluttering about. A pair of kingfishers with their young, in a nest faithfully copied from nature,
are defending themselves against the threatened attack of some kind of weasel.


This scene is nearly double the size of the others, and the above copy is about $1 / 19$ th of the original size.

Below these hunting scenes is the procession of women bearing offerings, already described (p. 181). Beside and above the door from the corridor are cattle being driven through the water during the inundation. - Above these are a number of rams. According to Herodotus the Egyptians sowed their seed on the wet mud, and caused it to be trodden in by swine, and this task is here

being performed by the rams, stimulated partly by blows and partly by food held before"them. The explanatory hieroglyphic inscription is to the effect that - 'it is well for him who loves work!'


Above the rams is a ploughing scene, adjoining which is a man hoeing the ground, while another is scattering the seed.


In the fishing scene (above) the overseer, leaning on his staff, says to his servants, 'Ye are like apes', to which they good-humouredly reply, 'Thy command is executed; it is done excellently'. At the top (not easily distinguished) is a quarrel among sailors, who appear to be interchanging violent blows and remonstrances - 'Thou art of a pugnacious hand, but I am so gentle'.

Among the mastabas which are now shown only by special permission from the Director of Museum, and from which the sand
requires to be removed, one of the most interesting, and after those of Ti and Mera the best preserved, is the -

Mastaba of Ptahhotep, which lies between the step-pyramid and Mariette's House.

Ptahhotep, like Ti, lived in the 5th Dynasty, and was a priest of the Pyramids of Aser, Ra-en-user, and the 'divine dwelling of Men-kau-Hor'. He also bore a nomber of other titles. The best portrait of him is on the E. wan. His costume is similar to that of Ti (p. 182). His yonng son, with the lock denoting infancy, is holding his staff with his right hand and a hoopoe in his left. The visitor shonld observe the harvest of the papyrus plant, and the games which were probably connected with the vintage festival. The grapes are being plncked, trodden, and pressed. A hunting scene lower down is full of hnmonr and life, and some of the animals will interest zoologists. Most of the honnds are 'slughi' (p. 182). The attack and slanghter of the gazelle is a very spirited scene. Ptahhotep also indulges in lion-hnnting. A lion is represented seizing in its jaws the muzzle of a cow tied np as a bait, and fastening its claws into the animal's neck, while the calf stands behind its mother, and the kneeling hunter with his two honnds points out to them the lion on which he is about to let them loose. The fishing and fowling scenes are particularly well execnted. Another snccessful representation on the same wall is the procession of the retainers of Ptahhotep bearing offerings from the different villages on his estates. This cortége is headed by pngilists and prize-fighters. Captive lions and other smaller wild animals are being carried in cages, and the master of the dogs is leading his greyhounds and another kind of honnd resembling a hyena. Next follow mountain-goats, antelopes, and oxen. A cow is calving with the aid of a veterinary surgeon, and a number of calves on the gronnd are strnggling violently to disengage themselves from the cords with which they are bonnd. After these come flocks of ponltry. If the inscriptions are to be believed, Ptahhotep possessed 121,000 geese of one kind and 11,210 of another, 1225 swans, 120,000 small geese, 121,022 pigeons, and 111,200 goslings. Among the domestic ponltry are inclnded cranes, which their keeper brings before his master, connted, and in good order. Ptahhotep, sitting on a throne, wearing a panther-skin, and anointing himself with oil, snrveys the rich produce of his estates, watches the slaughter of his cattle, approves of the order kept by his clerks, and listens to the mnsic of harps and flutes. The list was exceedingly nsefal for the deciphering of hieroglyphics owing to the distinctness of the determinative symbols which accompany the carefully written words. This mastaba also contains a false door, bearing a representation of the entrance to a tomb as a symbol, on the $\mathbf{W}$. wall.

The Mastaba of Sabu, to the E. of that of Ti, also covered up with sand, contains similar representations, and an enumeration of the various kinds of cattle possessed by the deceased.

Of one kind of cattle he possessed 405, of another 1237, and of a third 1300; of calves 1220 of one kind, and 1138 of another. Besides these he had 1308 antelopes, 1135 gazelles, 1244 goats of a species resembling the antelope, and 1010 herons. The poultry (geese, ducks, and pigeons) is reckoned by thousands $(\underset{\alpha}{G}=1000)$.

The tomb of Ti is equalled in importance by the *Mastaba of Mera, which was discovered in the autumn of 1893, to the $\dot{\mathrm{N}}$. of the Pyramid of Teta, by M. de Morgan (p. 94), the energetic conductor of the recent Egyptian excavations. This tomb dates from the 6th Dyn. and contains 31 chambers and passages with highly-diversified reliefs, some of which show representations not elsewhere found. It
is divided into three sections, of which that marked $\mathbf{A}$ on the plan belonged to Mera, that marked B to his wife, Her uat Khert, surnamed Sesh-sesh, a king's daughter, and that marked C to his son Teta Meri. Section A. 1st


Chamber:Three seasons; S. wall, fowl-ing-scene; N. wall, flshing and hippopotamus hnnting. - The 2nd Chamber contains a mummyshaft. - 3 rd Chamber, ordinary representations. - 4th Chamber. E. wall, various handicrafts, the goldsmiths specially noteworthy; W. wall, cudgelling of an offender. - 5 th Chamber, empty. 6th Chamber. S. wall, procession of women representing thepossessions of the deceased; W. wall, fattening geese. - In the 7th Chamber, the serdâb, was found the painted statue of Mera. - 8th Chamber, procession of servants and retainers of the deceased; to the W., large stele. - 9 th Chamber, storeroom for spices. - We return through Chambers 8,6 , and 4 , to the 10th Chamber, on the E. wall of which are dancers, then enter the 11th Chamber (containing a shaft), and the 12th Chamber, on the N. wall of which are representations of wine-making and fruit-storing. - 13th Chamber. N. wall, statue of Mera; mountebanks and acrobats ; W. wall, boats; S. wall, fishing scenes. On the N . wall, to the left of the statue, Mera appears in a sedan-chair ; adjacent are dwarfs. - 14th-21st Chambers, storerooms.

Section B. 1st Chamber. W. wall, fishing scenes and bulls. 2nd Chamber, staircase. - 3rd Chamber, servants and dancers. 4th Chamber, serdâb. - 5th Chamber, beautiful stele, showing Mera in a sedan-chair with attendants. - 6th Chamber, empty.

Sbction C. 1st Chamber, hunting scenes; E. wall, geese. 2nd Chamber, empty. - 3rd Chamber, stele and attendants. - 4th Chamber, reliefs of garlands. - 5 th Chamber, serdâb.

In the immediate vicinity of Mera's tomb lies the Mastaba of Kali-n, which was discovered at the same time but is lessinteresting.

After having visited the Necropolis, the traveller may, if time permit, proceed to the S. Group of Sakkâra, a ride of $1 \frac{1}{4} \mathrm{hr}$. to the S. of Mariette's House. We pass near a space of ground about 440 yds. square, enclosed by broad and massive, but now very dilapidated, walls on the E., N., and W. sides, while the S. side is bounded by the natural hills of the desert. The object of this enclosure is a mystery to Egyptologists. Mariette, however, conjectured, with much probability, that the place was used as a pen for the numerous cattle slaughtered here as victims. Repeated excavations have been made within the precincts of the enclosure, but without result. - The route now leads straight to the Mastaba Fircaun, the most interesting monument of the $S$. group. To the left are the dilapidated Pyramids of Pepi I. and Sokar-em-saf. On the N.W. side of the mastaba is the still more dilapidated Pyramid of Pepi II., now used by the Arabs as a quarry. All these pyramids are constructed exactly in the same manner as that of King Unas (p. 165); the best coup d'oeil of the inner construction is obtained at the Pyramid of Pepi I., which has been opened at the top. But they are in such a ruined and dangerous condition that the director of the museum has had them all closed again. - The Mastaba Fir'aun, which may be ascended, is oblong in form, like all the other tombs of the kind, with walls sloping inwards. The entrance is on the N. side. It was first explored by Mariette, who believed that it was the tomb of King Unas (p. 165).

On the S. and E. slopes of the plateau of Sakķâra are numerous Rock Tombs. They are far simpler than the Mastabas both in point of construction and of internal decoration.

About $3 / 4 \mathrm{hr}$. to the S. of the Mastaba Fircann is Dahshúr. This place is perhaps identical with the Acanthus of Diodorus, where a leaky cask is once said to have stood, into which water from the Nile was daily ponred by 360 priests. On the margin of the desert there still grow nnmerons snnṭ trees, as in ancient times. On the desert platean of Dahshûr rise two large and two smaller pyramids of limestone, and two of brick, together with remains of others, all of which are at a considerable distance from each other. The N. Brick Pyramid, which was once covered with slabs of stone, is curious. It is sometimes pointed ont, but withont any authority, as the fabulous pyramid which Herodotus mentions as having been erected by King Asychis, who is said to have compelled his labourers to make bricks of mnd laboriously obtained from the bottom of a lake by means of poles. The entrance on the N. side was once approached by a vestibule. The present height of the pyramid is about 90 ft . only. - Excavations conducted at the base of this pyramid in the spring of 1894 by M. de Morgan (p. 94) have brought to light the treasures of the princesses Hathor-Sat and Sent-Senbets (12th Dyn.), which now form one of the chief attractions of the Gizeh Museum (p. 101).

On the S. side of another rnined pyramid, situated to the S.W. of the last, are traces of two embankments (p. 1.35), descending towards the E. from the larger Stone Pyramid on the W. The last is still 326 ft . in height and 234 yds. in width, being nearly as large as the Great Pyramid of Gîzeh, and in its solitude presents a very imposing appearance, even to an accustomed eye.

To the E. and S. are remains of several other pyramids. Still farther to the S. rises a pyramid of pecnliar form, sometimes called the Blunted Pyramid (comp. p. clxv), the lower slopes rising at an angle of $54^{\circ} 41^{\prime}$, while the sides of the apex form an angle of $42^{\circ} 59^{\prime}$. The whole pyramid was probably originally intended to have the same slope as the apex (as the sides of the neighbonring pyramid rise at an angle of $43^{\circ} 36^{\prime}$ ), but the lower part was never completed. This pyramid is $2061 / 2 \mathrm{yds}$. square and 321 ft . in height. The interior was explored as early as the year 1660 by Mr. Melton, an English traveller. In 1860 M. Le Brnn found a small chamber in the interior. No clne to the name of the builder has been discovered. On the extreme S . side of the plateau rises a brick pyramid, 99 ft . in height, marking the S. extremity of the vast Necropolis of Memphis, which extends down to Abu Roấsh (p. 134), towards the N., a distance of 23 M .

## 10. Bath of Helwân and Quarries of Ṭurra.

Railway to ( 14 M .) Helwân viâ Tinra in $3 / 4 \mathrm{hr}$. (fares and times of the trains to be learned at the hotels). The railway was originally built to connect the military establishments at Turra (see below) with the Citadel of Cairo, at the base of which lies the old station.

The trains start from the station in the Bâb el-Luk Square (Pl. $B, 5$ ), and follow the direction of the Shâri'a el-Manṣ̂ur. Beyond the stations of Seiyideh Zeinab (Pl. B, 7), Fum el-Kalîg (p. 81), St. Georges, and Madâbegh (to the E. of Old Cairo), the railway traverses the narrow plain between the Nile and the Arabian Hills, generally on the boundary between the cultivated land and the desert. - After another stoppage it reaches Turra or Turâ. A little to the right are the large military establishments and gunpowder mills and about $11 / 2 \mathrm{M}$. to the left are the quarries (see below) which, from the railway, look like openings in the cliffs. On the hill stand the ruins of an old fort. - Masara, a village on the Nile, is noted for the slabs of stone obtained in the neighbourhood, known as 'Balât', and used for paving purposes in almost every house of the better class in Egypt. - Beyond stat. Ma'șara the line, leaving the Nile, skirts the slopes of the Gebel Turra, and after ascending a considerable incline reaches the plateau on which the Baths of Helwân are situated.

14 M. Helwán. - Hotels. "Hôtel HElouan (the property of M. Snares, banker in Cairo, who is also proprietor of the railway), opposite the station, sumptuously fitted up, with terrace, 'pens.' from 60 pias., European waiters; "Grand Hôtel, with veranda, 'pens.' about 60 pias., incl. room. - Private Lodgings, at varions prices, are easily obtained. - The comfortable Bath House and the Grand Hôtel are under the management of Herr E. Heltzel. - Physician : Dr. A. Fenyes. - Additional information may be obtained at the viceregal bath-office.

Helwân, French Hélouan-les-Bains, an artificial oasis in the desert, 3 M . from the Nile, and 115 ft . above the average waterlevel, has belonged to the Egyptian government since 1880. Water

their health are strongly recommended not to remain in Cairo, but either to go on at once to Upper Egypt or to pass the winter in Helwân, where, besides the baths, they enjoy the advantages of perfect quiet and a remarkably pure and dustless atmosphere (comp. p. Ixvii). For the ordinary pleasure-tourist, Helwân has no attractions.

The sulphur and saline springs, which were also probably used in ancient times, have a temperature of $87^{\circ}$ Fahr. and resemble those of Aix in Savoy and Hercules Bad in Hungary in their ingredients. In 1868 attention was drawn to them by Dr. Reil, and in 1871-72 they were utilised for sanatory purposes by order of the Khedive Isma'il. The Bath House was rebuilt in 1888, and contains various kinds of baths (swimming baths in summer) and accommodation for douches, inhalation, and drinking the waters. There is also a basin containing water strongly impregnated with sulphur, $41 / 2 \mathrm{ft}$. deep, and 1200 sq . yds. in area. The interior of the Khedive's bath-house may also be inspected.

Near the sulphur springs, especially those situated farther to the W., which are still uncovered, a quantity of flint splinters have been found. - The banks of the Nile afford good wild-fowl shooting, but the desert game is shy and not easily reached.

An excursion to the quarries of Ma'sara and Turra takes half-aday. Those who visit them from the stations of the same name (see p. 188) must bring good donkeys with them from Cairo. The ride thither from Helwân takes $11 / 2 \mathrm{hr}$; ; candles and matches should not be forgotten. These quarries, which are still worked, yielded the stone used in the construction of the Pyramids. The stone is transported to the bank of the Nile by means of tramways, carts, camels, and mules. The Arabs make very poor miners. as they dread the darkness of shafts and pits. They quarry the stone on the outside of the rocky slopes only, while the quarrymen of the Pharaohs penetrated into the interior of the mountain and excavated large chambers, tunnelling their way until they came to serviceable stone, and leaving the inferior untouched. The roofs of these chambers are supported by pillars of rock. A few remains of hieroglyphics and coloured bas-reliefs are still preserved in the quarries, but they are of no historical value.

Several slabs of rock bearing figures and hieroglyphics have been found in one of the great rocky halls of Turra. One of these represents King Amenophis III. (18th Dynasty) sacrificing to the gods Ammon, Horas, and Hersheft; and on another we find him worshipping Ammon accompanied by Anubis, Sekhet, and Hathor. The inscription under the first slab (with which that on the second is nearly identical) runs thas from the second line onwards: - 'His Majesty ordered new halls (het-u) to be opened, for the purpose of quarrying the light-coloured and excellent stone of An for the construction of his buildings founded for perpetuity, after His Majesty had found that the halls of Rufui (Troja) had been tending to great decay since the time of those who had existed at the beginning (i.e. former generations). These were newly established by His Majesty'. Another inscription, of the time of Nectanebus II., runs thas: - 'This excellent quarry of Rufu was opened in order to construct the temple of Thoth, the twice great, the double Apera, the commander of the divine
speech, etc. . . . May (its) continuance be everlasting!' Other inscriptions inform us that the ancient name of the place was Ta-ro-fu, or more recently Ta-roue, or region of the wide rock-gateway, whence the stone of the pyramids was obtained.

These quarries were also worked during the Ptolemaic and Roman periods; and Strabo, who was generally well-informed, states that the quarries which yielded the stone used in building the pyramids lay on the Arabian bank of the Nile. He says that they were excavated in a very rocky mountain, called 'the Trojan', and that near them and the Nile lay the village of Troja, 'an ancient residence of captive Trojans who had followed Menelaus to Egypt and remained there'. Diodorus gives the same account of the foundation of the Egyptian Troja, but adds that Ctesias has a different version of it. Both authors were probably misled by the statement of Herodotus, that Menelans was hospitably received in Egypt when returning home with Helen from the siege of Troy. The name Ta-roue was corrupted by the Greeks to 'Troja', and as prisoners of state and of war, including many Asiatics, were chiefly employed in the quarries, it was not unnatural to suppose that the colony of quarrymen at the foot of the hill was a settlement of captive Trojans.

## 11. From Cairo to Suez viâ Ismacilifya.

Railway to Ismacilíya, 97 M ., in $31 / 2 \mathrm{hrs}$. (express as far as Zakâzik); fares 1 st cl. 70,2 nd cl .35 pias., return-ticket $\mathcal{Z} .150,53$ pias.); to Suez, 148 M ., in 6 hrs .; fares 97 or 49 pias., return-ticket (valid for a week), $\mathscr{E}$. 1 45, 73 pias.

A visit to the Suez Canal from Cairo takes four days: 1st Day. By train to Suez; in the afternoon and evening visit the harbour. - 2nd Day. Excursion in the morning to the Spring of Moses; in the afternoon by train from Suez to lsmarilîya (or by steamer if there happens to be an opportunity; see p. 204). - 3ra Day. Excursion in the morning to El-Gisr and walk through lismarilîya; in the afternoon by canal steamer to Port Sa'îd ( 5 hrs .). - 4 th Day. Visit the harbour at Port Sa'îd in the morning, and return to Ismafilîya by tramway; in the afternoon return by rail to Cairo. - Hurried travellers may save time hy omitting Ismarilîya, the attractions of which are not great. At Suez, Isma'îlîya, and Port Sarîd there are good hotels in the European style, where local guides may be engaged for the environs. - Provisions should be taken by railway travellers, as the railway restaurants are frequently closed.

The excursion to the Suez Canal may he conveniently made on the way back to Europe (or on the way to Palestine), as the Australian and Chinese mail-steamers touch at Suez and Ismóîîya and also at Port Sa'íd. For information as to the arrival of these steamers apply to the offices mentioned on p. 29; exact particulars as to days and hours are not generally obtainahle until a very short time before the appearance of the steamer. Comp. also p. 5.

The trains start from the principal station at Cairo (p. 27). As far as ( $281 / 2$ M.) Benha, the first halt of the express-trains, we follow the Alexandria line (pp. 27, 26). We here turn to the E., passing the stations of ( $331 / 2$ M.) Sheblengeh, ( 38 M .) Mit Yavîd, ( 39 M.) Minyet el-Kamh, and ( 46 M.) Zanlcalûn. - The watercourses and trees are more numerous and the landscape generally more picturesque and diversified than in the W. Delta.

47 M . Zakázik, the second station for express-trains ( 1 hr .27 min . from Cairo; good buffet).

Hotels. Hôtel d`EgYPTE, immediately to the left, in the main street, new and spacious, with good rooms and tolerable Greek cuisine and attendance, café with billiard-room below. - Hôtel Corbiere, an old and less
comfortable building, but with good French cuisine, table d'hôte in the evening.

British Consular Agent, Salv. Felice; German, R. Khedid.
Zakâzîk, a thriving, semi-European town, lies on a branch of the Freshwater Canal (p. 193) and on the Mu'izz Canal (the ancient Tanite arm of the Nile, p. 228). It is the capital of the E. province of Sherl̂îyeh and seat of a mudîr, and contains over 20,000 inhabitants. The situation of Zakâzîk, in the midst of a fertile tract watered by several canals, and connected with the richest districts of the Delta, is extremely favourable, and it is a rapidly improving place. The soil here has been very carefully cultivated since the time of Mohammed 'Ali (1826), and Zakêzîk forms the chief centre of the Egyptian cotton and grain trade. Many European merchants have offices here, and the large cotton-factories give the place an almost European appearance. An Arab market is held here every Tuesday.

Zakââ̂ḳ is the junction for branch-railways to Kalyûb (p. 26) and to $A b u$ Kebîr-Manşûra, etc. (see p. 215).

In the vicinity, near Tell Basta, $1 / 4 \mathrm{hr}$. to the S., lie the ruins of the ancient Bubastis, or Bubastus (Egyptian Pi-bast; the Pibeseth of Ezekiel xxx. 17), the capital of the Bubastite nome (p. cx). The goddess Bastit revered here was the Aphrodite of foreigners, the golden Cypris, and also the Artemis of the Greeks. Her temple, according to Herodotus the finest in the world, was the most important of the pilgrimage shrines in Lower Egypt. The remains of this temple were excavated in 1887-1889 by the Egyptologist Naville, at the expense of the Egypt Exploration Fund; but they are in too ruinous a state to repay a visit. The temple, begun by the pyramid-builders Cheops and Chephren, underwent frequent alterations at the hands of Ramses II. and other later kings, but owed its final form to the monarchs of the 22nd Dyn., who resided at Bubastis, and to Nektanebus I. At this period it consisted of four large halls, of an aggregate length of 600 feet; and in these were celebrated the joyous and licentious festivals in honour of Bastit. 'The young men of Aven (or On, p. 128) and of Pibeseth shall fall by the sword', says Ezekiel (xxx. 17), when speaking of their idolatrous practices.
'When the Egyptians travel to Bubastis', says Herodotus, 'they do so in this manner. Men and women sail together, and in each boat there are many persons of both sexes. Some of the women make a noise with rattles, and some of the men blow pipes during the whole journey, while the other men and women sing and clap their hands. If they pass a town on the way, they lay to, and some of the women land and shout and mock at the women of the place, while others dance and make a disturbance. They do this at every town that lies on the Nile; and when they arrive at Bubastis they begin the festival with great sacrifices, and on this occasion more wine is consumed than during the whole of the rest of the year. All the people of both sexes, except the children, make a pilgrimage thither, about 700,000 persons in all, as the Egyptians assert.' - These ancient festivals are recalled to some extent by the modern merry-makings at the fair of Țanta (p. 25).

On leaving Zakâzîk the train runs round the town, into the market of which we look down on the right. Immediately afterwards the Manṣ̂́ra line diverges to the left (p. 215). The fertile tract which we now traverse is part of the Goshen of the Bible. During the Turkish régimeit fell into a miserable condition, and at the beginning of the century afforded a very scanty subsistence to barely 4000 Arabs; but the cultivation was so rapidly improved by means
of the fresh-water canal that it now supports upwards of 12,000 prosperous farmers and peasants. The viceroy Sa'îd Pasha ceded this tract to the company of M. de Lesseps, but it was purchased by his successor Isma'îl Pasha for 10 million francs, erected into a separate province, and garrisoned with cavalry.

The Fresh-Water or Ismariliyeh Canal, constrncted in 1858-63 to supply the towns on the Suez Canal with drinking-water and enlarged in 1876, is in great part a restoration of an earlier canal, dating from the 14 th cent. B.C. This ancient canal, beginning at Bubastis, watered the land of Goshen with its branches, and entering the Bitter Lakes, changed their character, according to Strabo, and connected them with the Red Sea. The channel of the old canal, which was re-discovered by the French expedition of 1798, is still traceable at places, and its direction has frequently been followed by the engineers of M. de Lesseps. From the not inconsiderable remains of the old canal near Belbês, it appears to have been about 50 yds. ( 100 ells, according to Strabo) in width, and 16-171/2 ft . in depth. The somewhat steep banks are still strengthened at places with solid masonry. According to Herodotus the canal was fonr days' journey, and according to Pliny 62 Roman miles, in length. In ancient times the canal was primarily constructed for pnrposes of navigation, and it is now nsed by numerous small barges; but it is now chiefly important as a channel for conducting fresh water to the towns on its banks, particularly Isma'ilîya and Suez, and as a means of irrigating and fertilising the country through which it passes (comp. p. 208). Near Cairo the canal diverges from the Nile to the N. of the Kasp en-Nil, and thence traces to the N.E. the boundary between the Arabian platean (on the right) and the land of Goshen (on the left). At Abu Sulêman (p. 194), about $121 / 2$ M. to the E. of Zakâzîk, it is joined by the Bahr el-Mûsa, a branch-canal coming from Zakâzik, and runs to the E. through the Wddi Tumilat, which is over 30 Mi . in length. At Nefisheh (p. 194) the canal forks; the S. arm leads to Suez, while the N. arm, begnn in 1876 and opened in 1894, leads to Port Sa'id.

The Goshen of the Bible (Egyptian Gosem) is freqnently mentioned by Moses. Thns, in the Book of Genesis (xlv. 10), Pharaoh says to Joseph : - 'And thou shalt dwell in the land of Goshen, and thon shalt be near unto me, thou, and thy children, and thy children's children, and thy flocks, and thy herds, and all that thon hast'. Gen. xlvi. 28, 29 : 'And he sent Judah before him unto Joseph, to direct his face nnto Goshen; and they came into the land of Goshen. And Joseph made ready his chariot, and went np to meet Israel, his father, to Goshen, and presented himself unto him'. Gen. xlvii. 5, 6: - 'And Pharaoh spake nnto Joseph, saying, Thy father and thy brethren are come unto thee. The land of Egypt is before thee; in the best of the land make thy father and thy brethren to dwell; in the land of Goshen let them dwell. Gen. xlvii. 27: - 'And Israel dwelt in the land of Egypt, in the conntry of Goshen; and they had possessions therein, and grew, and multiplied exceedingly'. In a later passage the sacred record mentions the cities in Goshen in which the Israelites were compelled to work at the tasks imposed on them by Pharaoh. Exodus i. 11: - 'Therefore they did set over them taskmasters to afflict them with their bnrdens. And they built for Pharaoh treasnre cities, Pithom and Raamses'. Lastly, the first camping-places of the retreating Israelites are enumerated in Numbers xxxiii. 5 et seq.: - (1) Rameses, (2) Succoth, (3) Etham, and (4) Pi-hahiroth, 'which is before Baal-zephon: and they pitched before Migdol'. Leaving Pi-hahiroth, they then 'passed through the midst of the sea into the wilderness'.

The situation of the land of Goshen may now be approximately determined. According to the Septuagint (Gen. xlvi, 31) Goshen lay in the Egyptian nome of Arabia, the twentieth nome of Lower Egypt, the capital of which was Kesem, the Phakusa of the Greeks. The ruins of this city, with a temple built by Ramses II., have been discovered by Naville to the E. of

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Zakeâzîk, near the modern Saft el-Henneh; and we are therefore probably correct in locating the ancient Goshen in the triangle between Bubastis (Zakâzîk), Belbês, and Abu Hammâd, with the addition perhaps of a part of the Ŵàdi Ṭ̂mîlât.

Beyond ( 59 M.) stat. Abu Hammâd, on the left, begins the Arabian desert, which is here an undulating sandy plain with scanty desert vegetation. It is intersected in an easterly direction by the fertile Wâdi Ṭ̂milât and the fresh-water canal, which present a striking contrast to their surroundings. On the right, beyond the canal, stretches a beautiful green tract of country, beyond which rise the hills of the desert.

66 M. Tell el-Kebir, an insigniflcant place, noted as the scene of 'Arabi's defeat by the British troops in 1882. On leaving Tell el-Kebîr the train passes a cemetery laid out by the English, with a tasteful monument to the British soldiers who fell in the struggle with 'Arabi. A little farther on a tower and a palace come in sight.

80 M. Mahsameh. The small railway-station of Ramses was constructed for the traffic connected with the cutting of the Fresh-Water Canal (p.193). The neighbouring ruins of Tell el-Maskhûta probably mark the site of the Pithom (i.e. 'house of the god Tum') of the Bible, where the Jews served in hard bondage and built treasure-cities (or storehouses) for Pharaoh (Exod. i, 11). Lepsius erroneously identified these ruins with the Raamses of the Bible. The spot has been explored for the Egypt Exploration Fund by Naville, who discovered among the temple-buildings several grain-stores, in the form of deep, rectangular chambers without doors, into which the corn was poured from above. These perhaps date from the time of Ramses II., and may possibly be the actual 'storehouses' of the Bible. - Beyond this point the train runs through an entirely desert track.
$93 \mathrm{M} . N e f i ̂ s h e h$ is the junction for the lines to Ismarîlîya and to Suez, though the Suez trains also run viâ Ismarîlîya. As we approach Isma'îlìya the blue Lake Timsâh (p. 211) presents a beautiful and striking contrast to the desert just traversed, especially if some large sea-going steamer happens to be passing, with its masts overtopping the low houses of the town.

97 M. Isma'iliya (p. 211) ; steam-tramway to Port Sa'̂d, see p. 195.

The Suez train returns to Nefisheh, and then turns to the S. (left). On the right we observe a large viceregal uursery for trees. The train crosses the fresh-water canal, and remains on the $\mathbf{W}$. bank all the way to Suez. To the right lies the desert. The train passes Serapeum, a village founded in 1860 , with neat gardens. The ancient ruins found here were believed to be those of a Serapeum, until the discovery of a stone with the Persian sun-disk and a cuneiform inscription proved them to be those of one of the three colossal memorials raised by King Darius on the banks of the canal (p. 193) between Bubastis and the Red Sea (see p. 195).

Farther on, to the left, we obtain a fine view of the bluish-green Bitter Lakes (p. 210), through which the Suez Canal passes. To the right rises the Gebel Geneffeh, or Gebel Ahmed Daher, with its productive quarries, which yielded material for the construction of the canal. More in the background are the heights of the Gebel 'Uwêbid. The next station is ( 113 M.) Fâyid. Near ( $1251 / 2 \mathrm{M}$.) Geneffeh we reach the $S$. end of the Bitter Lakes. On the left again stretches a vast sandy plain. On the right, above the lower hills, tower the dark masses of the 'Atâka Mts., the outlines of which stand out very prominently by evening light; they are also conspicuous from Suez. Before reaching the next station the Suez canal is visible for a short time.

138 M. Shalûf et-Terrâbeh, dating from the construction of the canal. Near Shalûf is the second of the monuments erected by Darius (see p. 194), which was discovered in 1799 by MM. Rozière and Devilliers, two of the savants attached to the French expedition, and was excavated by M. de Lesseps in 1866.

The red blocks, which belong to two different monuments, bear Persian cuneiform and hieroglyphic inscriptions. In the latter the name of Darius occurs. The representations still preserved exhibit a curious combination of Persian and Egyptian characteristics. The winged disk of the snn of the Egyptians resembles the 'Feruer' of the Persian monuments. The Persian tiara is adorned with the heads of two kings, opposite to each other. The figures are in the Egyptian style, and between the outstretched hands of each is an Egyptian 'cartouche', or frame for the name of a king. One of the blocks bears hieroglyphics in front (half obliterated) and cuneiform characters at the back.

148 M. Suez. The terminus is in the Rue Colmar (P1.8; p. 196). The traveller on arrival is beset by a number of cicerones who speak broken English, French, and other languages.

From Isma'iliya to Port Sa'id, 50 M ., steam-tramway in $31 / 4 \mathrm{hrs}$. (fares 12, 9, 6 fr ., return-ticket $18,131 / 2,9 \mathrm{fr}$.; luggage 40 c . for 40 kilogrammes or 88 lbs ., with 55 c . for the luggage-ticket). This narrow-gauge line (Tramway a Vapeur, système Decouville) belongs to the Suez Canal Co., and was opened in December, 1893. It passes the following stations: $91 / 2 \mathrm{M}$. El-Ferdân (p. 212); ' 54 Kilomètres' ( $331 / 2$ M., i.e. from Port Sa'îd, canal measurement, see p. 209); 21 M. El-Kantara (p. 212); then '34 Kilomètres' and ' 24 Kilomètres' ( 21 and 15 M .) ; $391 / 2$ M. Râs el-ÊEsh (p. 213). 50 M. Port Sá $\hat{\imath} d$, see p. 213.

## 12. Suez and its Environs.

Hotels. - Hôtel Bel Air, at the station, well managed, good table; Hôtel d'Orient, $1 / 4 \mathrm{M}$. from the station, unpretending; Hôtel Bachet, at Port Tewfik (p.197), the property of the Canal Co., well spoken of. Beer. Grand Bar, Rue Colmar (kept by a Greek).

Post and Telegraph Offices (Egyptian) at the station. Telegrams to foreign countries should be despatched by the wires of the Eastern Telegraph Company (English).

Vice-Consuls. British, J. R. Norrish, Esq.; American (Consular Agent), Alfred W. Haydn, Esq. - German, Hr. Meyer; French, M. Jalouzet; Austrian, Hi. L. Fonda; Russian, Señ. Costa (p. 198); Italian, Sig. Jona; Belgian (consular agent), M. Beyts; Dutch, M. Guy; Danish, M. Remandä.

Junction Railway between the town and the harbour-island (p. 197), in $1 / 4 \mathrm{hr}$. (fares 3,2 pias., return-ticket $41 / 2,3$ pias.); trains hourly from 6.30 to 10.30 a.m., at 12 noon, and hourly from 1.30 to $8.30 \mathrm{p} . \mathrm{m} . ;$ returning hourly from 6 to $11 \mathrm{a} . \mathrm{m}$., at $12.30 \mathrm{p} . \mathrm{m}$., and honrly from 2 to 9 p.m.

Rowing Boats. A charge of $8-10$ pias. is usually made for a rowingboat for an hour. The boatmen are apt to be extortionate in their demands, as travellers on their way to or from India, and making a short stay only, are often too lavish in their payments.

Disposition of Time. The afternoon of the day of arrival may be devoted to a visit to the Harbour and Canal Entrance, by rowing-boat or by the junction-railway. The next forenoon (early start necessary; comp. p. 198) may be spent in an excursion to the Springs of Moses, returning in time to take the afternoon-train (hitherto at 3 p.m.) to Ismarilîya.

Suez lies at the head of the gulf of that name, one of the $N$. extremities of the Red Sea, and to the S.W. of the mouth of the Suez Canal. On the W. it is commanded by the picturesque blue heights of the 'Atâka Mts., and on the E. by hills belonging to the Asiatic coast range. Before the construction of the great work of M. de Lesseps, Suez was a miserable Arabian village, with 1500 inhab. at most, while it now contains between 10,000 and 11,000. To this day, however, the town presents a very dreary appearance, and its trade has again greatly fallen off, the stimulus given to it by the opening of the canal and the large docks having apparently been transient. Neither the Arabian quarter with its seven insignificant mosques, nor the European quarter, which contain several buildings and warehouses of considerable size, present any attraction. The Rue Colmar is the principal thoroughfare of the latter quarter. The Arabian bazaar is unimportant, but at the entrance to it are stalls of beautiful shells and coral from the Red Sea, for which exorbitant prices are asked (comp. pp. 202, 203).

History of Sgez. Little is known regarding the ancient history of Suez. A town mentioned for the first time by Lncian under the name of Klysma, or Kleisma, seems to have occupied this site at a very early period. It was a fortified place, and the special task of the garrison was to protect and maintain the old isthmus-canal completed by Darius (p. 206). Ptolemæus calls the place Clysma Praesidium, but places it much farther to the $S$. During the snpremacy of the Arabians, who reopened the old canal for a short time (p. 207), the town was named Kolzum or Kolzim. After the 8 th cent. it seems to have snnk into insignificance, but it is mentioned by Abdulfidâ as the starting-point for Tûr (p. 272). The chief historical interest attaching to the place lies in the fact that it is usually supposed to be close to the point where the Israelites crossed the Red Sea (comp. pp. 193, 239).

On a mound of debris to the $N$. of the town, not far from the station and the magazines of the 'Peninsular and Oriental Steam Navigation Company', is a kiosque of the Khedive, commanding a fine view of the mountains of the peninsula of Sinai, the sea, the harbour, and the town. The hill is called by the Arabs Kôm el-Kolzum, and was probably the site of the ancient Kolzum (see above). Beyond the railway, to the W., are the mud-huts of an Arab sailors'


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quarter. The small eminence to the N.W. is named the Beduin's Hill. - A little farther to the N. is the mouth of the Fresh Water Canal (p. 193), the flow of which into the conduits, as well as its discharge into the sea, is regulated by means of a large lock. The level of the canal is here $61 / 2 \mathrm{ft}$. above that of the Red Sea. The large buildings to the N. of it are the English Naval Hospital and the engine-house of the 'Compagnie des Eaux.' To the E. of the canal is the large camping-ground for the caravans coming from Arabia, which present a most interesting sight.

On the way from the kiosque of the Khedive to the canal are a number of salt pools, sometimes tinged red by innumerable microscopically small crabs, which, in the morning especially, diffuse an odour resembling that of violets.

As the N. extremity of the Gulf of Suez ends in a shoal, which is dry at low water, the entrance of the Suez Canal and the necessary harbour-works were constructed 2 M . to the S ., at the beginning of the deep water. A stone Pier, 50 ft . wide, on which is the railway mentioned at p. 196, connects the town with these works, and affords a pleasant and interesting promenade (donkey $\overline{0}-8$ pias., according to the time), commanding beautiful views of the bay and the mountains enclosing it. At low tide the outline of the sandbank is distinctly traceable.

At the end of the pier is an artificial Island, about 50 acres in area, constructed of the large quantities of earth dredged from the canal. To the left, on this island, are the railway-station of TerrePlein, at Port Tewfik, and the Small Dock of the Canal Co. Farther on is the Waghorn Quay, over 1000 yds. in length, with a lighthouse at the extremity, beside which is a Statue of Lieutenant Waghorn (Pl. W; p.207), an enterprising Englishman, who, after having spent the best years of his life in establishing regular communication between England and India viâ Egypt, died in London in poverty in 1850. M. de Lesseps has placed a French inscription to his memory on the $W$. side of the monument. The large basin farther S., which has been named Port Ibrâhîm, and is capable of containing 50 vessels of the largest size, is divided by massive bulwarks into two parts, one for vessels of war, and the other for the mail steamers and trading vessels. The mouth of the dock is protected by gates. The masonry is everywhere admirably constructed, particularly that of the massive breakwater outside the docks. The dry dock is 123 yds. long, 25 yds. wide, and 29 ft . in depth.

On the E. side of these docks are stakes and buoys indicating the entrance to the Suez Canal (p. 208). The situation of the sandbanks and of the navigable channel is of course best seen at low tide.

For a visit by Rowing Boat (p. 196) to the docks and canal entrance, calm weather is desirable. The beautiful clearness of the green water, with its curious shells and seaweed, and the almost invariable beauty of the sunsets render a boating-excursion here unusually attractive.

The Excursion to the Sphings of Moses takes $7-8 \mathrm{hrs}$. Bocts (p. 196) and Donkeys (there and back abont 20 pias.) should be ordered a day in advance, and an early morning start should be made. Calm weather is very desirable for this excursion also, not only for the passage in the boat (by which the donkeys must also he conveyed) but also because the driving sand in the desert is very disagreeable in a high wind. About 2 hrs . should be allowed for the stay at the springs, including time for luncheon (which must he brought by the traveller) and for a walk on the beach in search of shells.

We are rowed across the shallows lying between the town and the harbour-island, then turning to the left, enter the Suez Canal, and row to the $N$. to the landing-place which is about $61 / 2 \mathrm{M}$. from the Springs. The whole of the route thither by land traverses the sand of the desert, skirting the sea, which lies to the right. Towards the W. tower the imposing 'Atâka Mts. (p. 195), which present a most picturesque appearance on the return route. To the left rise the yellowish ranges of the Gebel er-Raha, belonging to the long chain of the Gebel et-Tih, and facing the S.E. We are now traversing Asiatic soil, while at the same time the eye ranges over part of the African continent.

Another route, practicable in good weather, is the sea-route to the so-called 'Caravan Landing-place' (marked 'Molo' on our map), about $21 / 4 \mathrm{M}$. to the $N$. W. of the Springs, which are thence reached on foot. The length of the outward and homeward voyages in this case depends upon the wind, so that no satisfactory estimate of the duration of the excursion can be given. Those who make the excursion by water need hardly be reminded of the profound historical interest attaching to this part of the Red Sea, if indeed that sea be really meant by the 'reedy sea' ('yam suff') of the Hebrew Scriptures and not the Sirbonic Lake as supposed by Brugsch (comp. pp. 196, 238).
'This is the scene of Pharaoh's attempted passage, and these waves were once ploughed by the ships of King Hiram and King Solomon, which every three years brought gold from Ophir, and ivory, ebony, and incense, to the harhours of Elath and Ezion-Geber. Here, too, once plied the light Moorish vessels mentioned in the Old Testament, and similar to the craft now used by the Indo-Arabians. From this point the Phœnician mariners employed by King Necho began their famous circumnavigation of Africa ahout the year B.C. 600 , and at a later period enterprising Greek sailors set forth to solve the great geographical prohlem of the ancient Hellenic world regarding the true character and situation of India. The Red Sea was also navigated by the merchantmen of the Ptolemies and the Romans, who by this route imported precious stuffs from India and spices from Arahia - the robes and pearls which decked Cleopatra, and the frankincense which perfumed the halls of the Palatine. The waves of this sea, moreover, wash the shores of places deemed sacred hy two different religions, viz. Mt. Sinai, and Jedda, the seaport of Mecca'. (Stephen.)

The Springs of Moses, Arabic 'Ain (plural 'Ayûn) Mûsa, form an oasis, the property of $M$. Costa (p. 196), about five furlongs in circumference. The vegetation here is very luxuriant. Lofty datepalms and wild palm saplings, tamarisks, and acacias thrive in abundance; and vegetables are successfully cultivated by the Arabs who live in the mud hovels near the springs, and who expect a
bakshîsh from visitors. Their gardens are enclosed by opuntia hedges and palings, at the entrances to which the traveller is beset by barking dogs. The springs lie in funnel-shaped cavities at the top of isolated mounds, $3-41 / 2 \mathrm{ft}$. in height, where they form turbid pools of brackish water. The largest of them, enclosed by an old wall, is said to have been the spring called forth from the rock by the rod of Moses, or the bitter waters which the prophet sweetened by casting a certain tree into them. The scene of these miracles, however, must have been a considerable distance to the S . of this point; but this oasis may have been the spot where Moses and the Israelites sang their beautiful song of praise, recorded in Exodus, xv.
'I will sing unto the Lord, for he hath triumphed gloriously: the horse and his rider hath he thrown into the sea. The Lord is my strength and song, and he is become my salvation: he is my God, and I will prepare him an habitation; my father's God, and I will exalt him. The Lord is a man of war: the Lord is his name. Pharaoh's chariots and his host hath he cast into the sea: his chosen captains also are drowned in the Red Sea. The depths have covered them: they sank into the bottom as a stone. Thy right hand, 0 Lord, is become glorious in power: thy right hand, 0 Lord, hath dashed in pieces the enemy. And in the greatness of thine excellency thou hast overthrown them that rose up against thee: thou sentest forth thy wrath, which consumed them as stubble. And with the blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, and the depths were congealed in the heart of the sea. The enemy said, I will pnrsue, I will overtake, I will divide the spoil; my lust shall be satisfied upon them; I will draw my sword, my hand shall destroy them. Thou didst blow with thy wind, the sea covered them : they sank as lead in the mighty waters'.

The springs have been described by Fraas, the geologist, whose account will be best appreciated by the traveller if he visits the mound marked by a solitary palm, about 10 min. to the S.E. of the gardens (view).
'On the top of this mound is a pool, 4 ft . in diameter and $11 / 2 \mathrm{ft}$. in depth. The water, $70^{\circ}$ in temperature, is very salt and bitter, and the bottom of the pool is covered with inky-black mud. The discharge of the spring forms a stream $3-4$ inches in width, which, however, is soon swallowed up by the desert sand at the foot of the hill. Numerous waterbeetles, which clung to the hand when touched, the Melania fasciolata Oliv., which seemed to luxuriate in the tepid water, and, as I was much pleased to see, myriads of transparent water-fleas (Cypris delecta Müll.) disported themselves in the basin. In the hollow of my hand I caught dozens of them, which swam about for a time with their fringed feelers, and at length got ashore. I next observed in the mud the innumerable transparent scales of dead insects, and I at length discovercd that the rock enclosing the hill was entirely composed of Cypris skins. It was now obvious that the Cyprides had built the hill. Millions of these little insects had in the course of ages cemented with their calcareons integuments the sand through which the springs rise, thus at length forming a kind of wall around it; and when the surface was in this way raised beyond the height to which the pressure of the water forced the springs, some of them were entirely shut off and compelled to seek some other outlet. . . . The pressure of the water evidently comes from the Ráhah Mts., although they are $10-14$ miles distant. . . . Had it not been for this organic life, and particularly that of the Cyprides, which gradually walled in the channels of the springs with their remains, so that the surface of the water is at some places $40-50 \mathrm{ft}$. above the level of the desert, and 100 ft . above the level of the sea, these waters would simply have been lost among the sands of the desert." (O. Fraas.)

Conchologists (p. 202) will find a number of interesting shells on the beach at low tide, but the best places are farther $S$.

Unless the traveller is bound for Mt. Sinai, he will probably not extend his journey farther in this direction. To some of our readers, however, the following brief description of the Red Sea and its shores and of its natural history will not be unacceptable.

The Red Sea and its Coasts (comp. Map, p. xxxii). The Red Sea, Arab. El-Bahr el-Ahmar, or Bahr el-Hejaz, the ancient Sinus Arabicus, is an arm of the sea extending from the Indian Ocean towards the N.W., between Arabia and Africa, to a distance of 1400 miles. It is entered at the S. extremity by the Bab el-Mandeb, a strait 18 M . only in width. At the broadest part (in $16^{\circ} \mathrm{N}$. lat.) it is 221 miles in width. Towards the N. end it gradually contracts, and at length divides into two arms, the Gulf of 'Akaba (Sinus Alanites), and the Gulf of Suez (Sinus Heroopolites; Arab. Bah. Sués, or Bahr Kolzum, so called after the ancient Klysma). The sea averages $400-600$, and is at places 1000 fathoms in depth, but the shores are flanked with a network of subterranean coral reefs and islands, which often extend a long way from the coast. These reefs render the navigation of this sea very dangerous, particularly at the narrower parts of it, the most dreaded point being the so-called Bahr Far $\mathrm{An}^{2}$ (p. 245), near Tûr. The course of the large steamers is in the middle of the sea, which is free from these reefs, but the smaller Arabian vessels always steer close to the shore, with the configuration of which their captains are well acquainted, in order that they may run into one of its nnmerons creeks (sherm) on the slightest threatening of bad weather. The Arabs adopt the cautious policy of never sailing at night or in stormy weather, unless compelled; and when they are obliged to cross the sea, they always wait for settled weather. In spite of the miserable construction of their vessels, shipwrecks are accordingly of rare occurrence.

No rivers fall into the Red Sea, but a number of intermittent raintorrents descend from its banks. The water is of a beautiful blue colour, changing to pale green where there are shoals or reefs near the surface. No satisfactory reason for the modern name of the sea has yet been given. The difference between high and low tide is $31 / 2-7$ feet. The prevalent wind in the $N$. part of the sea, particularly in summer, is the N. wind, and in the S. part the S.E. wind in winter, and the N.W. in summer. The sea is therefore unsuitable for large sailing vessels, which, when bound for India, always sail round the Cape of Good Hope.

The coasts of the Red Sea consist of barren rock or sand, and are almost entirely uninhabited. A little way inland the mountains rise to a height of $4000-7600$ feet. So far back as the time of Solomon the navigation of the Red Sea was of considerable importance, and several of the seaports, such as Berenike and Myos Hormos, were celebrated. Since the opening of the Suez Canal the sea has been regularly traversed by the large E. mail-steamers, which run direct from Suez to Aden. The traffic between the different places on the coast is carried on by means of the Arabian coasting vessels (katêra, barge; sambak, vessel of medium size with a short cutwater; baghieh, the same, without cutwater; dau, or dow, a vessel of considerable size with a prodigious development of stern; rangeh, the same, with a long cutwater). Regular communication between some of the more important places is also kept up by Egyptian steamers, which ply fortnightly between Suez, Jedda, Suâkin, and Masaura. Steamers of the Austrian Lloyd and others also ply between Suez and Jedda at the time of the Meccan pilgrimage.

African Coast. On this side of the Red Sea there is not a single place of conseqnence between Suez and Kosêr. At Gimsâh, opposite Tû̀, sulphur-mines were formerly worked, and it was then a place of some importance; but the mines have been abandoned, and the whole district is no.w inhabited by a few nomadic Beduins only.

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Kosir or Kosseir ( 3000 inhab.) is the harbonr of Upper Egypt, from which it is $41 / 2$ days' journey in a straight line (see Baedeker's Opper Egypt). It occupies the site of the Leukos Limen (White Harbour) of the Ptolemies and the Tua of the ancient Egyptians. It was formerly one of the chief outlets for the products of Egypt, particularly grain, and was also the start-ing-point of numerous pilgrims, but since the opening of the Suez railway it has lost nearly all its importance. It was a place of no importance down to the first decade of the present century, when, under the auspices of Mohammed 'Ali, it increased to a town of 7000 inhabitants. It possesses a quay, a wooden mole 400 ft . long, two mosques, and several bazaars. The small houses are all whitewashed. The only edifices of any size are the government buildings erected by Mohammed ${ }^{\text {c Ali opposite the mole, }}$ the adjacent custom-house, and a large government grain-magazine. The citadel, which was erected by Sultan Selîm in the 16 th century, still contains a few cannon dating from the French period and a mortar with the inscription, 'L'an III de la Rép. française'. In the distant background rise picturesque mountains, cnlminating in Gebel Abu Tiyar* and Abu Suba'a, 4200 ft . in height. The harbour is sheltered from the prevailing $N$. wind only. Drinking-water has to be brought to the town in skins from the mountains, one day's journey distant.

Between Kosêr and Rảs Benals, where Berenike was sitnated, dwell the nomadic "Ababdeh' (p. xlv), and between the latter and Snâkin the 'Bisharîn' (p. xlv), both being tribes of a Nnbian type.

Suâkin ( 11,000 inhab.), situated in a sterile region with a saline soil, possesses a good harbonr. It belonged to the Turks down to 1865, when it was ceded to Egypt, and since that period it has rapidly improved. The principal part of the town lies on a small island, and there are also a number of substantial stone houses belonging to it on the mainland. Behind it extends the busy village of Gef, which is inhabited by the native Bisharin. About $11 / 4 \mathrm{M}$. farther inland are the springs which supply the town with water and irrigate the gardens. The chief exports, being products of the district, are cattle, hides, butter, indiarubber, tamarinds, and mother-of-pearl; while ivory, ostrich-feathers, and other commodities from the Sûdân are brought to Suâkin viâ Kassala and Berber, and exported hence. Suâkin was formerly an important depot of the slave-trade. This seaport is a convenient starting-point for the exploration of the Sûdân, and formed the basis of the British operations against the Mahdi's lieutenant (p. cxxxii) in 1885 and subsequent years. It is still occupied by a British garrison.

Masau'a or Massowah ( 16,000 inhab.), the seaport of Abyssinia, belonged to the Turks as early as 1557, was ceded to Egypt in 1865, and was occupied by Italy in 1885. It lies on two islands, Masau'a and Taulad, connected by stone dykes with each other and with the mainland, while on two peninsulas projecting from the latter are the pleasant villages of Arkiko and Mokullu, with their country-honses and gardens. Masaura consists almost entirely of stone buildings, including large barracks, and is protected by three forts. It is the capital of the Italian colony of Erythraea, on the W. coast of the Red Sea (about $95,000 \mathrm{sq}$. M. in extent, with 450,000 inhab.), and carries on a brisk trade in commodities similar to those of Suâkin. The population consists of Ethiopians, Arabs, and 600 Europeans. This nnmber does not include the garrison, which consists for the whole colony of 224 officers, almost all Europeans, and 6061 men, including 3795 natives. The climate is very hot, but not unhealthy.

Arabian Side. The seaports of the province of Yemen, on the E. side of the Red Sea, are Mokha, Hodeda, and Lohdya. Mokhâ has fallen entirely to decay, and Hodêda alone is visited once monthly by the steamers of the Austrian Lloyd. These places lave long since been superseded by the English seaport of 'Aden.

The most important seaport on the Red Sea, a great focus of Oriental trade, and one of the wealthiest towns in the Turkish empire, is Jedda situated 46 M . to the W . of Mecca, of which it is the port. Pilgrimages from every Mohammedan country converge here, and the merchants
transact business with the devotees on their arrival and departure. The inhabitants trade with the interior of Arabia, with Egypt, E. Africa as far as Mozambique, Mesopotamia, Persia, India, and the Malay Islands. Jedda is the chief market for pearls, mother-of-pearl, and black coral, and for the coffee, balsam, senna leaves, aromatic herbs, and horses and donkeys which Arabia produces. It is also a great depot of Oriental carpets, muslins, woollen and silk stuffs, spices, cocoa-nuts, essential oils, and other products which are exported to the western Mohammedan conntries. The imports are corn, rice, butter, oil, and not unfrequently slaves. The covered bazaars and khầns are therefore very interesting, and the markets are well supplied with fruit, which does not grow in the utterly sterile environs, but is imported from El-Yemen by water and still more extensively from Taif by land. The harbour lies at a considerable distance from the town, which can only be approached by small craft. Water for drinking is collected in cisterns. The houses are lofty and substantially built, and the town possesses handsome government buildings and a castle. Outside the walls the Muslims point out a stone structure, 120 yds. long and 6 yds. Wide, as 'Eve's Tomb'. Over the 'holy navel' is placed a chapel, containing a hole in the interior through which the visitor can look down on the stone covering that part of the sacred remains. This spot is only one-third of the way from the feet to the head ( 39 yds .), so that the upper part of Eve's frame must have been disproportionately large. At the time of the Wahhabite wars the town was taken by the Egyptians, but has again belonged to the Turks since 1840. In 1858 a terrible massacre of the Christians took place here, on whicb occasion the French and English consuls were murdered, and the town was bombarded by the English in consequence.

Farther to the N. lies Yenbaf, the seaport of Medîna, which lies about 92 M . to the E. of it. Yenba el-Bahr, situated on the coast, with about 2000 inhab. only, lies in a sterile region, while the larger town of Yenbar en-Nakhl, with about 5000 inhab., situated nearly a day's journey inland, is surrounded with palms and other vegetation. The chief exports are sheep, hides, honey, and dates. Steamers touch here at the season of the pilgrimage only. As Yenbar en-Nakhl is only nominally under the Turkish supremacy, Europeans cannot safely visit it except under the protection of one of the principal inhabitants of the place. Medîna, like Mecca, is forbidden ground to Christians.

There are no harbours of note between this point and Suez, but ElWejj, opposite Kosêr, is an important quarantine station. Since the cholera was brought to Egypt by the Meccan pilgrims in 1865, the quarantine establishment here has been annually fitted up for a month and a half or two months, at the time of the return of the pilgrims after the Great Beirâm. Both the caravans travelling by land, and vessels of every nation from Arabian ports, must undergo quarantine here for five days, or for a longer period if the outbreak of an epidemic is apprehended. While the quarantine lasts, Wejj presents a very busy appearance. The great Mecca caravan, which travels viâ 'Akaba, passes this way both in going and coming. The town itself has $600-800$ inhab. only, a castle built by Sultan Selîm, with a garrison of a few soldiers, a spring of fresh water, and, as the latter is insufficient during the quarantine season, a steam engine for the distillation of sea-water. - The N. part of the Arabian coast, as far as El-Wejj, is under the supremacy of Egypt.

Natural History of the Red Sea (by Dr. C. B. Klunzinger). Among the numerous natural products of the Red Sea, which is of a tropical character, with a fauna almost entirely different from that of the Mediterranean, we need only mention those of commercial value and those frequently offered for sale to travellers as curiosities. The prices demanded are usually exorbitant, but may be reduced by bargaining.

The Mother-of-Pearl Shells (sadaf) of the Red Sea form an important article of commerce, but, owing to the undue extent to which the fishery has recently been carried, the yield has greatly fallen off. The Beduins of the coast, who train slaves as divers, carry on the fishery
during the summer. The price of the shells averages 12-15 piastres tariff per okka ( $21 / 2 \mathrm{lbs}$ ), varying according to the size. The largest of the shells are rarely more than two pounds in weight, and the finest are apt to be perforated by worms, in which case they are valueless. The principal mart on the Red Sea for mother-of-pearl and pearls is Jedda ( $p$. 201), the seaport of Mecca. Pearls may sometimes be purchased direct from the Beduins or their slaves, but they ask more than the pearls are worth in Europe, $15-20$ pias. being often demanded for one of small size. The small discoloured pearls, though valueless, are also frequently offered for sale. The Arabs grind them down, and prepare an eye-salve from the powder.

Another common bivalve is the busv (Tvidacna gigas), a huge kind of clam-shell. The indigestible flesh, called 'surumbak', is dried and sold in the markets as an article of food. This shell also yields pearls, but they are dull and worthless.

Among the univalves the most important is the Buth, a kind of whelk, which the hawoi, or conjurer at fairs, uses as a horn. Large and unstained specimens are rare, costing $8-15$ pias. each. Other large varieties of the same species are of less value. A very common shell-fish is the large gemel or abu subraa (Pleroceras lambis), which has six long fingerlike projections; its flesh is also dried and sold as surumbat (see above). The divers frequently bring up specimens of the large malha (Cassis cornuta), which is of a stone-grey colour externally, and covered with a thick yellow substance at the mouth, in which cameos may be cut. The wad'a, or cowry, or 'porcelain shell' as it is sometimes called (Cypraea), and the morsåa, or cone-shell (Conus), are very abundant and rarely worth more than a few piastres each. A small white cowry is used in the 'troll-madam' game. A small black-and-yellow striped cowry (Columbella mendicaria), known as the silêm, is sometimes exported to the Sûdân, where it is used instead of small coin. The glossy mosm'a (Nerila polita), which is often found on the seashore, is sometimes used for the same purpose. One of the prettiest shells of the Red Sea is the abundant small pink wardan or silesêfu (Monodonta Pharaonis) with its black and white knobs. Among other shells frequently offered for sale are the Murex, with its long spines, the gibrin (Oliva), the long conical mirwad, or screw shell (Terebra), the large and thin Dolium, and the small Haliotis, or ear-shell. The nehêd, or top shell (Trochus), and the sar'a (Turbo) are sometimes polished with muriatic acid so as to resemble mother-of-pearl, and are used for ornamental purposes. Black coral, or yus ${ }^{\prime}$, which realises a high price, is used for the manufacture of rosaries, pipe mouthpieces, and ornaments. The purple dem el-akhwan, or organ coral, is sometimes used as a dye, and the blocks of the porous coral (Porites) for building purposes. Other kinds of coral, or stony zoophytes, known as sha'ab, bleached perfectly white, are frequently seen in the shops. They sometimes resemble roses, trees, leaves, and bulbous growths. The traveller should, if possible, make a point of seeing the Subaqueods Coral Formations near Suez. A boat is taken in calm weather as far as the slope of the coral reef of Shafab, which skirts the shore; it has, however, lost much of its former beauty, as the zoophytes have died and their colours have faded. Those who are interested in marine zoology should walk along the cliffs at low tide, when they will find thousands of curious shell-fish and zoophytes in the pools, under the stones, and on the beach. They may also amuse themselves by gathering edible mussels, limpets, and sea-urchins, and watch the eccentric movements of the crabs. A visit to the Fish-Mareet is also recommended, where the curious and brightly coloured members of the finny tribe are seen to far better advantage than in a museum. The singular looking ball-fish (p. lxxxiii) is often stuffed and offered for sale. A large crab, known as the bint umm $e_{1} \cdots \cdot u b b a n$, which is caught on the shore by moonlight without difficulty, is esteemed a delicacy. The tortoise-shell yielded by the loggerhead turtle, and the thick skin of the gild, or dugong (Halicore cetacea), form considerable articles of commerce. According to some authorities the Jewish ark of the covenant was covered with dugong leather.

## 13. From Suez to Port Said. The Suez Canal.

The passage of the Suez Canal is interesting only on one of the large steamers, for from the small steamboats which ply regnlarly between Isma‘ilîya and Port Sa‘id the passenger cannot see beyond the embankments of the Canal.

The $S$. part of the Canal, from Snez to Ismarîlîya, including the Bitter Lakes and the entrance to Lake Timsâh, is the more interesting. Owing, however, to the nncertainty which prevails as to the arrival of the ocean mail-steamers (comp. p. 191), the traveller cannot always count upon finding one at Suez. The passage from Suez to Port Sa'îd occupies $15-22$ hrs. The fare by the British steamers is about $3 l$., by the French steamers 100 fr ., by the German steamers $60-80$ marks; for the tax levied by the Canal Co. on each traveller, see p. 209.

## a. Isthmus of Suez and History of the Canal.

The Isthmus of Suez, a narrow neck of land which connects Africa with Asia, is at its narrowest part 70 M . in width. On the S. side it is washed by the N. part of the Gulf of Suez (Arab. Bahr Kolzum, Greek Heroopolite Bay), the western of the two arms of the Red Sea which separate Africa and Asia. The Isthmus is a low-lying tract of land, the S. part of which may be regarded as a kind of continuation of the gulf. At a very remote period the Red Sea and the Mediterranean were probably connected, or at all events the former extended as far as Lake Timsâh, as fossil conchylia, particularly varieties of the Spondylus, now occurring in the Red Sea, but not in the Mediterranean, have been found there. The isthmus, however, is undoubtedly of very ancient formation, having been as broad at the time of the journey of Herodotus (B.C. 454) as it is now.

The Isthmus of Suez has, from a very early period, formed an important highway between Asia and Africa. A considerable part of its area was occupied with lakes and swamps, while the higher points were fortified to prevent the passage of invaders. Near Pelusium, the 'Key of Egypt', at the E. extremity of the curve formed by the coast of the Delta, to the S.E. of Port Sa'îd, were situated the passes by which the empire of the Pharaohs was entered. The high-road from Asia skirted the coast of the Mediterranean, passing Rhinocolura (the modern El-'Arîsh, p. 234), traversed the neck of land separating the Sirbonic Lake from the Mediterranean, and led by Casium (see below), with the temple of Jupiter Casius (the modern Râs el-Kasrûn $\dagger$ ), and by the

[^38]town of Gerrha ${ }^{\dagger}$, to Pelusium (p. 212), whence several roads diverged to the interior of the Delta. Three other roads, one from Mt. Casiustt leading to the E., the second from Gerrha, and the third from Pelusium, converged in the middle of the isthmus (probably near the barrier of El-Gisr), joining the route leading thence past the Serapeum and the W. bank of the Bitter Lakes to the ancient Arsinoe, at the N. end of the Gulf of Suez. The Mediterranean was thus connected with the Red Sea by an overland route at a very early period. The idea of a Suez Canal is no modern conception. After the powerful monarchs of Thebes had expelled the Hyksos and subjugated a great part of the $W$. side of the continent of Asia, the coast districts of S. Arabia, and many islands and maritime towns of the Mediterranean, Seti I. and Ramses II. (pp. criii, cix), the great and warlike princes of the 19th Dynasty, became desirous of establishing communication by water between the Nile and the Red Sea in order that their navies and merchantmen might thus pass between the latter and the Mediterranean. This project was probably carried out as early as the reign of Seti I., as a representation of his time on the outer $N$. wall of the great banquet hall of Karnak (see vol. ii. of the Handbook), elucidated by inscriptions, informs us that, on his victorious return from Asia, Seti had to traverse a canal (ta tenat, or 'the cutting') swarming with crocodiles (so that it must have communicated with the Nile), and defended by bastions, the names of which distinctly indicate that it must have been situated on the frontier of the empire. The construction of the canal is, moreover, attributed by many ancient authors, including Herodotns, Aristotle, Strabo, and Pliny, to Sesostris (Seti I. and Ramses II.). The canal may possibly have led from Lake Timsâh to Pelusium, and thus have connected the two seas directly. Blocks bearing the names of Ramses I., Seti I., and Ramses II., found near Kantara (p. 212), seem to favour this conjecture. At a much later period, after Seti's canal had probably been obliterated owing to neglect, Pharaoh Nekho (p. cxi) undertook to construct a canal between the Nile and the Red Sea. The new canal quitted the Nile at Bubastis (p. 192), and entered the Arabian Gulf near the ancient Patumos. No fewer than 120,000 Egyptians perished while engaged in

[^39]the work, and the king afterwards abandoned the undertaking, as he was informed by the oracle that the barbarians alone would profit by it. By the 'barbarians' were chiefly meant the Phœnicians, whose fleets at that time commanded both the $\mathrm{Me}-$ diterranean and the Red Sea. The canal was probably completed, after the conquest of Egypt by the Persians, by Darius, the son of Hystaspes, the great organiser of the Persian empire, and not by Ptolemy Philadelphus, as stated by some authors. Numerous traces of the work, and fragments of monuments with inscriptions both in the Persian and Egyptian character, have been found (p. 210). Under the Ptolemies the canal system was extended. While one arm led from Phakusa on the Nile to the lakes towards the S . of Pelusium, that is, direct to the Mediterranean through the connected lakes of Balah and Menzaleh, another branch was now constructed from Lake Balah to the Bitter Lakes, into which the fresh-water canal watering the Scriptural land of Goshen also fell (p. 193). It was thus feasible in the time of the Ptolemies to travel by water from the Nile to the $S$. part and also to the N. part of a canal, which, like the modern Suez Canal, connected the Red Sea and the Mediterranean in a nearly direct line. When Antony returned to Egypt after the battle of Actium in B. C. 31, Cleopatra made an unsuccessful attempt to convey her ships across the Isthmus of Suez in order to escape with her treasures from Octavian. As, however, it is very improbable that she would have attempted to transport vessels of considerable size for so long a distance by land, there can be little doubt that the canal still existed in her time, although in a dilapidated and unserviceable condition.

The canal is said to have been restored during the Roman period. Another canal, beginning near Cairo, and terminating in the Gulf of Suez, the precise course of which, probably following the earlier channel, is nowhere described, is said to have been called the Amnis Trajanus, and was probably constructed during the reign of that emperor (A.D. 98-117). A canal of Hadrian is also mentioned. It is certain, however, that the chief mercantile route between the Red Sea and Italy did not follow the Nile and the canal thence to the Gulf of Suez. The Indian vessels of the Romans touched at Berenike, a little to the N. of the tropic of Cancer, and still more frequently at Leukos Limen, the modern Kosêr, or at Myos Hormos in the latitude of Siut (Lykopolis) on the Red Sea. From these two last-named seaports, which were much frequented, especially in the month of September, goods were conveyed by the great caravan-route to Koptos on the Nile (near the modern Keneh), and were then transferred to boats which carried them down the Nile to Alexandria, where they were shipped for their ultimate destination.

After the Arabs had conquered Egypt, they must have been desirous of connecting the Lower Egyptian part of the Nile as
directly as possible with the Red Sea. 'Amr ibn el-'As (p. cxx) accordingly restored the ancient canal (of which the Khalîg at Cairo is said to be a portion), and used it for the transport of grain from Fostât (p. 35) to Kolzum (Suez), whence it was exported by the Red Sea to Arabia. The bed of the ancient canal is said to have been pointed out to 'Amr by a Copt, to whom a remission of the poll-tax was granted as a reward. The canal is said to have been filled up by the morbidly suspicious Khalîf Al-Manṣ̂r ibn Mohammed (754-775), in order to cut off the supplies of the army of the rebel Mohammed ibn Abu Ṭàlib at Medîna, but the truth of this statement is questionable. It is at all events certain that the canal became unserviceable after the 8th century. At a later period the Venetians frequently thought of coustructing a canal through the Isthmus with a view to recover the trade which they had lost owing to the discovery of the route round the Cape of Good Hope, and several travellers advocated the scheme; but no one seriously attempted to carry it out. Leibnitz, too, in his proposal regarding an expedition to Egypt, made in 1671 to Louis XIV., the greatest monarch of his age, strongly recommends the construction of such a canal.

Sulṭàn Muștafa III., the admirer of Frederick the Great, 'Ali Bey, the enterprising Mameluke prince, and Bonaparte all revived the scheme, and the latter on his expedition to Egypt in 1798 (p. cxxvii) even caused the preliminary works to be undertaken, but the actual execution of the project seemed almost as distant as ever. Lepère, Bonaparte's chief road engineer, and a man of great ability, surveyed the ground under the most unfavourable circumstances, and not without personal danger, but owing to a serious miscalculation he threw great doubt on the feasibility of the undertaking. While in reality the level of the two seas is nearly the same, Lepère estimated that of the Red Sea to be nearly 33 ft . higher than that of the Mediterranean. Laplace among others protested against the accuracy of this calculation, as being in defiance of all the laws of hydrostatics, but the supposed obstacle was sufficiently formidable to prevent any farther steps from being taken, although the scheme still had many supporters, until M. de Lesseps (1805-1893) directed his attention to the matter. It was reserved for this shrewd and energetic Frenchman to carry out the task which had seemed impracticable to a series of wealthy and powerful princes. In 1836 he came to Cairo as a young consular élève, and there had his attention called to Lepère's Mémoire regarding the scheme of connecting the two seas, which led him to consider its great importance, although Lepère himself doubted its feasibility. In 1838 he made the acquaintance of Lieut. Waghorn, an Englishman (p. 197), whose zealous advocacy of the construction of a route between Europe and India vià Egypt stimulated his zeal for a similar project. In 1841 and 1847 Linant Bey, the viceroy's en-
gineer of water-works, and Messrs. Stephenson, Negrelli, and Bourdaloue, demonstrated the inaccuracy of Lepère's observations, and proved that the level of the two seas was nearly the same, so that the construction of a canal between them was possible. In 1854 M. de Lesseps, having matured his plan, laid it before Sa'îd Pasha, who was then viceroy, and who determined to carry it out. Difficulties were thrown in the way of the enterprise by the English government during Lord Palmerston's ministry, but on 5th Jan. 1856, permission to begin the work was formally granted by the viceroy. A considerable time, however, elapsed before the necessary capital was raised, and it was not till 22 nd April, 1859, that the work was actually begun. The viceroy undertook to pay many of the current expenses, and provided 25,000 workmen, who were to be paid and fed by the company at an inexpensive rate, and were to be relieved every three months. In order to provide these workmen with water, 4000 water-casks suitable for being carried by camels had to be constructed, and 1600 of these animals were daily employed in bringing them supplies, at a cost of 8000 fr . per day. On 29 th Dec., 1863, the fresh-water canal (p. 193) was completed, so that the company was thenceforth relieved of the enormous expense of supplying the workpeople with water. The hands now employed, among whom were a number of Europeans, were less numerous, and much of the work was done by machinery, of 22,000 horse-power in all.

On 18 th March, 1869 , the water of the Mediterranean was at length allowed to flow into the nearly dry, salt-encrusted basins of the Bitter Lakes, the N. parts of which lay $26-40 \mathrm{ft}$. below the level of the Mediterranean, while the S. parts required extensive dredging operations. The opening of the Suez Canal was inaugurated on 16 th Nov., 1869, and the magnificent festivities which took place on the occasion are said to have cost the Khedive no less than 4,200,000l.

The cost of constructing the canal amounted to about 19 million pounds sterling, of which $12,800,000$ was paid by the shareholders, while the rest of the sum was almost entirely contributed by the Khedive. In 1875, however, the British Government acquired 177,000 of the Khedive's shares for a sum of $4,000,000 l$. The Suez Canal Company (Compagnie Universelle du Canal Maritime de Suez) also possesses lands, buildings, and other property valued at nearly $3,000,000 l$. The capital was raised in the following manner : -

Original capital, in 400,000 shares of $20 l$. each . $8,000,000 l$.
Loan of 1867-68, repayable in 50 years by means of a sinking fund . . . . . . . . . . $4,000,000 l$.
Loan of 1871, repayable in 30 years . . . . $800,000 \mathrm{l}$. Total : $\overline{12,800,000 l}$.
The Canal is 160 kilomètres ( 100 M .) in length, and the E .
bank is furnished with posts at intervals of 5 kilomètres. Near the stations, which generally consist of a few wooden huts only, are passing-places for the large steamers, named 'Gare du Nord' and 'Gare du Sud' respectively. The Canal is 26 ft . in depth, thus admitting vessels drawing $24-25 \mathrm{ft}$. of water. The surface varies in breadth from 65 to 120 yds ., while the width of the bottom is 24 yds . only.

The great mercantile importance of the Canal is apparent from the following data. The distance from London to Bombay viâ the Cape of Good Hope is 12,548 English miles, and viâ the Suez Canal 7028 M. only. The saving thus effected is 44 per cent of the distance. From Hamburg to Bombay by the Cape $12,903 \mathrm{M}$., by the Canal 7383 M. ; saving 43 per cent. From Trieste to Bombay by the Cape 13,229 M., by the Canal 4816 M.; saving 63 per cent. From London to Hongkong by the Cape $15,229 \mathrm{M} .$, by the Canal $11,112 \mathrm{M}$.; saving 28 per cent. From Odessa to Hongkong by the Cape 16,629 M., by the Canal 8735 M .; saving 47 per cent. From Marseilles to Bombay by the Cape 12,144 M., by the Canal 5022 M.; saving 59 per cent. From Constantinople to Zanzibar by the Cape 10,271 M., by the Canal 4365 M.; saving 57 per cent. From Rotterdam to the Sunda Strait by the Cape 13,252 M., by the Canal 9779 M. ; saving 26 per cent.

The passage of the Canal, which is open to the vessels of all nationalities, has been practicable both by day and by night since the introduction of the electric light.


The nationalities of the vessels traversing the Canal in 1890 were as follows: -

| British | 2522 | essels of | ,331,094 | tons |
| :---: | :---: | :---: | :---: | :---: |
| German | 275 | - - | 490,586 |  |
| French | 169 |  | 365,903 |  |
| Dutch | 144 |  | 284,511 |  |
| Italian | 87 | - | 143,720 |  |
| Austrian | 55 |  | 118,017 |  |
| Other nationalities | 137 |  | 192,233 |  |

The number of passengers on board these vessels was about 106,000 .
The dues amount to 10 fr . per ton, with an extra payment at present of 3 fr . per ton, 10 fr . for each passenger, and $10-12 \mathrm{fr}$. for pilotage according to the tonnage of the vessel. The net receipts are also steadily increasing: -


Steamers are not allowed to steam through the Canal above a certain speed, as their wash would injure the embankments.

## b. Passage of the Suez Canal.

The entrance to the Canal from the Gulf of Suez is approached by a navigable channel in the sea, which is indicated by certain landmarks (see above). The vessel first passes the lighthouse (red
light) at the end of the pier running out from the Asiatic shore, and then a second (green light) near the docks at the end of the great railway pier. It then follows the deep navigable channel, which at the end of the Canal is 300 yds . in width, but gradually contracts. We pass the navigable channel to Suez, bordered by shallows, which branches off to the N.W., and then, nearly in the latitude of Suez, we enter the mouth of the canal. On that part of the W. bank of which the Canal has made an island, by separating it from the mainland, rise the workshops and coal magazines of the company and the quarantine establishment. At low tide the shallows in the $\mathbf{N}$. part of the gulf are visible, and a series of islands is always to be seen at the extremity of the gulf, which, but for the Canal, might be crossed on foot at low tide. On the westernmost island, situated opposite the railway-station and the hotel, is an old burial-ground, and on a larger island farther to the E. are the company's furnaces and workshops.

At the 150 th kilomètre (reckoned from Port Saiid) the desert rises in a slight eminence, on which lie a number of huge granite blocks, the remains of two monuments erected here by Darius, during the Persian period, and still bearing traces of hieroglyphics and of the Persian cuneiform characters (comp. p. 195).

Near Shal̂̂f et-Terrâbeh (a station on the left, near the 139th kilomètre; see p. 190) is the second of the monuments erected by Darius. At this point no less than 40,000 cubic yds. of limestone, coloured red and brown with iron, had to be removed in the course of the excavation of the Canal, and interesting geological formations have been brought to light (comp. p. lix).
'The lower stratum of the bank contains a layer of sharks' teeth (Carcharodon megalodon Ag.) . . . The limestone rock of which the bank consists, and which is rapidly decomposed by exposure to the air, is mingled with salt and gypsum, and betrays its pure oceanic origin; for not only does its lowest stratum contain numerous teeth and vertebre of the Carcharodon, but the rock itself contains bivalve shells and remains of Bryozoa, which fall out as the rock disintegrates. Above the limestone lies a layer of loose sand. A thin stratum of the rock, which is full of remains of boring conchylia and crocodiles' teeth, also contains bones and teeth of large quadrupeds, Cetacea, and sharks'. - (O. Fraas.)

The Canal now enters what is called the Small Basin of the Isthmus, which consists entirely of shell formations, and thence leads into the Large Basin of the Bitter Lakes. Brugsch identifies the Bitter Lakes with the Marah of the Bible (Exod. xv. 23; comp. p. 241). At each end of the large basin rises an iron lighthouse, 65 ft . in height. The water is of a bluish-green colour. The banks are flat and sandy, but a little to the left rises the not unpicturesque range of the Gebel Geneffeh (p. 195).

A little farther on (near the 89th kilomètre) is the cutting which conducts the Canal through the rocky barrier of the Serapeum (p. 194). At the 8 Tth kilomètre is situated Tusun, which is easily recognised by the whitewashed dome of the tomb of a certain Shêkh Ennedek, a wealthv chief, who, after having made a pilgrimage to


(1)


## PORT SA'îd

1:32.000

SHine marking depth of 3 Fathouns ar 18 Feet.


Hôtels:
a.Hötel des Pays-Bus b.Hotel de Fraruce.

1. Passport, Custom-house \& Kgyptian Telegraph Office. 2 Austrian hloyd. 3.Messageries Marilines. 4 Parinsulard Oriental Ca.
2. Russian Steomboat Office. Consulates
3. Germaze de Russian. 7. Austrian.
4. British.
9.American.
5. Brerct.

## 11. Italian.

12.Swodish de Norwegian
13. Egyptian Govermment Offices.
14. Knglish Depôt
15.Egyptian Post office.
16. French Post affice
17. Eustern Telegraph.
18. Skughter House.

Mecca, is said to have presented his cattle and his gardens to the poor, and to have spent the rest of his life on the Gebel Maryam near Lake Timsâh in pious meditation. Excavations in the neighbourhood of Ṭusûn have led to the discovery of many interesting fossil remains of large animals belonging to the meiocene tertiary formation, and pieces of fossil wood have also been found here (p. 131). - Before entering Lake Timsâh we pass the foot of the Gebel Maryam, which an Arabian legend points out as the place where Miriam, when smitten with leprosy for her disapproval of the marriage of Moses with an Ethiopian woman, spent seven days, beyond the precincts of the camp of the Israelites (Numbers, xii.).

At the 80th kilomètre the Canal enters Lake Timsáh, or the Crocodile Lake, on the N. bank of which lies the town of Isma'iliya. The lake, which is now about 6 sq . M. in area, and of a beautiful pale-blue colour, was, before the construction of the Canal, a mere pond of brackish water, and full of reeds. On 18th Nov., 1862 , the water of the Mediterranean was let into this basin, which is traversed by two artificial channels for the passage of large vessels.

Isma'îliya. - Hotels. Victoria Hotel (Cook's), near the quay, with pretty veranda, cuisine, etc., capable of improvement, R. 6, B. 2, luncheon 4 , D. 5 , pens. 12 s ; Hòtel de la Gare (kept by a Greek), unpretending, good cuisine.

Railway Station (p. 195), to the N.W., between the European and Arab quarters. - Tramway (manual power) between the quay and the railway station. - Steam Tramway to St. Vincent, a settlement to the E., in connection with the steamers on the Canal, and to Port Sa'id (p. 195).

Steamboat daily (about 1.20 p.m.) to Port $S a^{\prime} \hat{i} d$, arriving about 6.25 p.m.
Post and Telegraph Offices and Chemist's Shop, in the Place Champollion, not far from the railway-station.

While the Canal was being constructed this town was the central point of the works, and the residence of numerous officials and traders, so that its traffic soon became very considerable, and it has even been extolled by modern poets as a 'wonder of the desert'. Its suddenly acquired prosperity declined almost as suddenly when the canal works were completed, but the town has regained a little of its former animation within the last decade, owing to the fact that the traffic between Cairo and the great Asiatic and Australian mail-steamers is beginning to desert the former route viâ Alexandria in favour of that viâ Isma'îlîya. The houses and gardens and the viceregal château, which had fallen into a dilapidated condition, have been restored. The climate is pleasant and the air dry, notwithstanding the proximity of the water. The ground, which has been reclaimed from the desert by means of irrigation, has been planted with tasteful gardens. A pleasant walk may be taken along the lebbek-avenue, on the Quai Méhémet-Ali, as far as the château of the Khedive and the interesting water-works with their fine park. - The best way of spending a few leisure hours here is to visit the hill of El-Gisr (p. 212; 1-2 hrs.; donkey 1 fr. ).

Canal Journey to Port Saîid. The steamer (p. 204) at first follows the navigable channel indicated by stakes. To the S. rises the Gebel $A b \hat{u}$ Balah range. In $1 / 4 \mathrm{hr}$. we reach the entrance to the Canal, which now intersects the plateau of El-Gisr ('the threshold') in a straight direction. The hills of El-Gisr, which cross the course of the Canal a little to the N. of Lake Timsâh, presented the most serious obstacle to its construction. The average height of the 'threshold' is 52 ft . above the sea-level, and it is now about 82 ft . above the bottom of the Canal. In order to form a cutting through it, no less than 18,767,000 cubic yds. of earth had to be removed, and 20,000 fellâhîn were employed in the work before machinery could be brought into operation. At the top of the hill is the deserted village of $E l$-Gisr, with a chapel to the Virgin of the Desert, a small chalet, and a mosque. A flight of steps ascends to this point from the Canal. In clear weather the view hence embraces a great part of the Isthmıs, the frowning 'Atâka Mts. rising above Suez, the majestic mountains of the peninsula of Sinai, the course of the Canal, and the green expanse of the Bitter Lakes.

The Canal is flanked with high banks of yellow sand. At the next passing-place we obtain a glimpse of the desert. Near $E l$ Ferdân (at the 63rd kilomètre) the Canal passes through a cutting, and then traverses Lake Balah, from which it is separated by a low embankment. We next reach El-Kantara ('the bridge'), or properly Kantarat el-Khazneh ('bridge of the treasure'), situated on a rising ground between the Menzaleh and Balâh lakes, and forming a kind of natural bridge between Africa and Asia. The caravans starting from the town of Şallihîyeh, situated on the old Pelusiac arm of the Nile, and the point where the chief commercial routes of the N.E. part of the Delta unite, pass this way. The steam-tramway to Port Sa'îd (p. 195) has a station here, near which are several restaurants (Hôtel de la Poste, déjeûner 4 fr., very fair; opposite to it are 'Refreshment Rooms'). The hill to the left commands a tolerable survey of the environs.

About $11 / 2 \mathrm{M}$. from Kantara lie a number of large hlocks of the same sandstone conglomerate as that of which the colossal figures of the Memnon consist. They appear to have been used as altars in some monumental edifice, which, as the inscriptions inform us, was erected by Seti I. in honour of his father Ramses I., and completed by Ramses II., the son of Seti. To what ancient town these ruins helonged has not been ascertained. A moderate day's journey distant are situated the extensive ruins of Pelusium, the celebrated eastern seaport and key to Egypt, which now contains no objects of interest. The ruin-strewn Tell el-Herr, and the more extensive Geziret el-Farama, which is also covered with dehris, were once occupied by the ancient fortress.

The mounds of debris named Tell Defenneh ('treasure-bills'), situated to the $N$. of the caravan route hetween Es-Sâlihityeh (p. 216) and El-Kantara, at the ancient Pelusiac mouth of the Nile, contain the remains of a camp of the Greek mercenaries of Psammetikh I. These were excavated in 1886 by Prof. Flinders Petrie, who found numerous fragments of pottery, arrow-heads, weapons, and other articles. Mr. Petrie identifies the spot with the Greek Daphnae and with the Tarhpanhes or Tehaphnehes of the Eihle (Jer. ii. 16; Ezek. xxx. 18, etc.).

Immediately beyond Kantara begins Lake Menzaleh, through which the Canal is constructed in a perfectly straight line to Port Saîid ( 45 kilomètres). The brackish waters of this lake extend over an area of about 1000 sq . M., covering what was once one of the most fertile districts in Egypt, and was intersected by the three most important arms of the Nile in ancient times, the Pelusiac, the Tanitic, and the Mendesian. Among the numerous towns and villages situated here were the important cities of Avaris, the name of which, afterwards changed to Pelusium, Tanis (p.228), and Tennis (p.229).

Immense flocks of pelicans and silver herons, some flamingoes, and a few herds of buffaloes are to be met with here. Special permission is necessary for the right to shoot here, the best months being March and April. If possible, the sportsman should return to Port Sarid every evening, as the nights are often cold and rainy; but, if provided with a tent, a cook, and other necessary appliances, he may camp out on several of the different islands in succession.

The operation of draining the lake has been begun, particularly of the part adjoining the Canal. Curious mirages are sometimes observed here.

Râs el-ÉEsh is the last ( 15 th ) station. We soon come in sight of the numerous masts of Port Sa'id, which we reach in $3 / 4 \mathrm{hr}$. more. To the N.W. are the white stones of the cemetery, the tombs in which are constructed in the form of vaults of masonry above ground, as the soil is saturated with salt-water at a depth of 2 ft . below the surface.

Port Sa'id. - Hotels. Grand Hôtel Continental (Cook's; kept by Francesconi), on the quay, opposite the office of the P. \& O. Co. (Pl. 4), with pretty veranda, rooms poor, cnisine tolerable, pens. 12 fr. *Hôtel de France (Pl. b), near the Place de Lesseps, moderate charges. - The Eldorado and the Grand Casino are two much-frequented music halls, which may be visited by ladies; theatrical performances are given at the former in winter. Café Paradis, Qnai Francois-Joseph.

Egyptian Post Office, Pl. 15; French, Pl. 16; Egyptian Telegraph Office, Pl. 1; Eastern Telegraph Co., Pl. 17.

Consuls. British, Mr. E. B. Gould; American, Mr. Broadbent; French, M. Daumas; German, Hr. Bronn; Greek, M. Londos; Holland, Hr. Rouyer; Italian, Cav. Leoni; Sweden \& Norway, Mr. Macdonald; Belgium, M. Holbeke; Denmark, Hr. Rouyer; Spain, Sen. de la Corte; Russia, Hr. Bronn.

Banks. Agencies of the Anglo-Egyptian Banking Co., the Ci'Edit Lyonnais, and the Banque Ottomane. - Prices at Port Sa'id are stated in francs, and French money, including French copper coins, is current there. But travellers on arriving from, Europe (p. 5) should provide themselves with Egyptian money, which, with the exception of British and French gold coins, is alone current in Egypt off the line of the Suez Canal.

Shops of all kinds abound, but the intrusive and almost insolent importunities of the proprietors addressed to the passers-by will sufficiently set the traveller on his guard. Chinese and Japanese articles, etc., at Fioravanti's.

Mail Steamer to Ismailitiya daily about 7 a.m., in connection with the afternoon train to Cairo. - Steam Tramway to Isma'îlîya, see p. 145.

Steamship Offices of all the large companies on the quay; where also Cook's Office is situated. Early application for berths in homeward-bound steamers is necessary in spring (comp. p. xvii).

Port $S a^{\prime} \hat{\imath} d$, the chief town of the Egyptian province of the Isthmus and Suez Cantal, lies at the E. extremity of an island which
belongs to the narrow strip of land separating Lake Menzaleh from the Mediterranean. It owes its origin to the Suez Canal, and it was expected that the prosperity of the place would increase rapidly, but its progress has only recently been marked. The population (17,000 in 1883) is now about 37,000, including 12,000 Europeans among whom the French preponderate. The customs revenue has almost doubled within the last ten years, being now $\mathscr{E E} .65,000$ annually; and the import of coal in 1892 amounted to $1,019,684$ tons. The opening of the fresh-water canal and the steam-tramway to Isma'îliya are expected to contribute to the prosperity of the town, so as to make it perhaps a dangerous rival even to Alexandria.

The construction of the harbour was attended with immense difficulty. It occupies an area of 570 acres, and has been excavated to a depth of $\mathbf{2 6 ~ f t}$. by means of laborious dredging. It is protected by two massive piers; the eastern running out into the sea towards the N. for a distance of an English mile; and the western, runniug to wards the N.E. for $1 / 2 \mathrm{M}$., being still unfinished. The latter is intended to protect the harbour from the mud-deposits of the Nile (comp. p. Ivii). Where they start from the land these piers are 1440 yds . apart, but their extremities approach within 770 yds . of each other. The navigable entrance, marked by buoys which are lighted at night, is only 100-160 yds. in width.

On the land ward end of the W. pier rises the *Lighthouse (Pl. 18), constructed of concrete, 164 ft . in height, and one of the largest in the world. Its electric lights are visible to a distance of 24 M . To the E. of it are quays and workshops. The streets extend along the W. side of the Inner Harbour, consisting of three sheltered basins in which vessels discharge and load. The first of these, beginning on the N . side, is the basin of the commercial harbour, the second is the arsenal harbour, and the third the 'Bassin Chérif'. The last is flanked with handsome buildings, which were erected by Prince Henry of the Netherlands as a depot for facilitating the Dutch goods and passenger traffic between Europe and the colonies of Holland; on his death (1879), they were purchased by the English government, and they are now used a military depot and barracks.

The Arab quarter lies to the W.
Ferry-boats (fare 10 pias.) across Lake Menzaleh to Damietta (p. 218) start from the 3rd kilometre on the Suez Canal, which may be reached on donkey-back or by rowing-boat. A sailing-boat for the whole distance may be hired for 25 pias.

## 14. Towns of the Central and Northern Delta.

A tour in the inland and northern districts of the Delta, including a visit to the towns of Manṣura, Damietta, and Rosetta, and the exploration of some of the ruins of towns near the embouchures of the Nile, is attended with considerable difficulty and discomfort, with which the attractions are by no means commensurate. The chief characteristics of the monotonous scenery are extensive and often remarkably fertile fields, canals, and dirty villages snrrounded by palm-trees. A week at least is
required for the excursion, unless the traveller confine himself to places lying close to the railway. Those who are unacqnainted with the language, and propose to penetrate into the interior of the country, should be provided with a dragoman or a servant (p. xxi), a tent, and a conk, as there are no tolerable hotels except at Tanṭa, Damietta, and Rosetta. As wet weather and cold nights are not uncommon in the Delta in winter, the traveller should be well provided with warm clothing and rugs. A moderate supply of provisions and wine will also be found useful. Introductions should be obtained through the consulate at Cairo to the consular agents at Manṣ̂ra, Rosetta, and Damietta, and to the shêkh of the fisheries at Tanis.

Disposition of Time. 1st Day: From Cairo to Mansara by railway in about $41 / 2 \mathrm{hrs}$. ; excursion to Behbît el-Hager (p. 217). - 2nd Day : From Talkha, opposite Manṣura, to Damietto by railway in 2 hrs .; afternoon at Damietta (p. 218). - 3rd Day: By train to Tanta ; afternoon at Tanṭa (p. 24) -4th Day: From Tanta by early train to Damanhur (p. 23 ); thence on don key-back to Fum ei-Mahmudîyeh; and thence by boat to Rosetta (p. 225). 5th Day: From Rosetta to Alexandria by railway in $21 / 2-31 / 2 \mathrm{hrs}$. Rosetta is more conveniently visited as an excnrsion by rail from Alexandria and back.

A visit to Şa el-Пager (Sais; p. 222) and back may be made, under favourable conditions, in one day from Tanta, by taking the train to Kaf. ez-Zaiydt (p.24), and proceeding thence by boat or on donkey-back. A visit to San (Tanis; p. 228) requires several days. These places repay the trouble of visiting them even less than the other spots in the Delta.

## a. From Cairo to Manṣura.

92 M . Kailway viâ Belbês in $41 / 2 \mathrm{hrs}$. (not including detention at Zakâzîk); three trains daily (fares 1st cl. 66, 2nd cl. 33 pias.). - A longer and more troublesome ronte is that viâ Ṭanṭa to Talkha (p. 221), whence we ferry to Manṣûra.

From Cairo to ( $81 / 2$ M.) Kalyûb, see pp. 27, 26. - Beyond Kalyûb the main line to Alexandria (R. 3) diverges to the left. Our train turns towards the N.E., and traverses a fertile and wellwatered district, shaded by numerous trees. The next stations are ( 15 M .) Nawa and ( $191 / 2$ M.) Shibîn el-Kanâtir.

About $11 / 2$ M. to the S.E. of Shibîn el-Kinanâtir is the ruined site of Tell el-Yehudiyeh (Hill of the Jews). Ramses III. erected a temple here, covered with glazed mosaic tiles, the most valuable of which are now in the Gizeh Museum (p. 115). These tiles are of special technical interest, as their colouring is produced partly by variations in the glazing and partly by the use of separate inlaid pieces of glass. At a later date Onia, the high-priest of the Jews, aided by Ptolemy VII. Philometor, erected a temple for his countrymen who had been expelled from Jerusalem by the Syrian party, and had met with a hospitable reception in Egypt. In 1871 E. Brugsch discovered the remains of this temple, which was built after the model of the Temple of Solomon; but a visit to the ruins scarcely repays the trouble, as most of them are again buried in rubbish.

Next stations ( 29 M .) Inshâs and ( 36 M .) Belbês, the latter supposed to be the ancient Pharbaethus. The town was formerly a place of some importance from its situation at the junction of most of the routes leading from Cairo to the East. The railway now approaches the Fresh-Water Canal (p. 193). - 411/2 M. Burdên.

47 M. Zakâzîk, see p. 191. - The Manṣ̂ra train crosses the railway to Ismarilî̀ya and Suez and then the Pelusiac arm of the Nile and proceeds to the N.N.E., following the E. bank of the Mu'izz Canal, the ancient Tanitic branch of the Nile, and traversing a fertile district. Stations ( 55 M.) Mehîyeh and ( 60 M.) Abu Kebir.

From Abû́ Kebîr a branch-line rnns to the E. viâ Tell Fakus (p. 227) to ( $201 / 2$ M.) Ess-Salihîyeh, sitnated on the old Pelusiac arm of the Nile (p. 213) and on the caravan road to Syria. - Route viâ Tell Fâkus to Tanis, see p. 227.

Beyond Abû Kebîr the line turns to the N.W., crosses the Mu'izz Canal and a number of other smaller canals, and next reaches ( 65 M.) El-Bûha and ( 70 M .) Abû Shelfuk (route thence to Tanis, see p. 227 ). - 79 M. Sinbelâwîn.

92 M. Manstara. - Hotels (none of which supply meals). Hôtel d'Angleterre, on the river, with fine view and good rooms; Cafe on the groundfloor and the Club de Manṣara (introduction necessary) on the first floor. - Hôtel de France; Hôtel Egypitien; Hôtel Khedivial; all these are tolerable. - Restaurant. "Pasticceria Filiciano, with beer.

Vice-Consuls. British, Mr. Murdoch; American, Ibrahîm Dâad (con-sular-agent, also Austrian representative); French, Habib Calonche; German, G. Maksud; Belgian, Debbameh; Danish, Pr Piha; Italian, I. Piha; Russian, Hr. Greis.

Mansûra, a thriving town with over 30,000 inhab. and numerous new houses in the European style, lies on the right bank of the ancient Bucolic or Phatuitic arm of the Nile, now the Damietta branch, from which diverges the Ashmûn or Saghur ('the little') canal. Next to Țanṭa, Manṣ̂rra is the most important provincial town in the Delta; it is the residence of the Mudîr of the province of Dakahliyeh, and is the chief depot of the bread-stuffs, cotton, indigo, tobacco, hemp, and flax which this part of the Delta produces. There are several large manufactories here, one of the most important of which is the cotton-cleaning factory of the Compagnie Transatlantique Planta \& Cie., with electric lighting.

History. Mansûra (i.e. 'the victorious'), a comparatively modern place, was founded by Sultan Melik el-Kâmil in 1220, after the capture of Damietta by the Christians (p. 219), and doubtless as an advantageous substitute for that place in a strategic point of view, as it lies securely ensconced in the angle formed by the Damietta arm of the Nile and the Ashmûn Canal. The new fortress, according to the chronicles of Jordanus, was called New Damietta, to which the epithet of Manṣura, or 'the victorions', was afterwards added. Melik el-Kâmil constructed the place with great care, and threw a bridge, strengthened with iron, across the Nile, which served both for the purpose of communicating with the opposite bank and as a barrier to prevent the Christians from forcing their way farther up the Nile. The first serious attack made on Manşûra was by the Crusaders under Louis IX. of France in 1250. After encountering great difficulties they succeeded in crossing the Ashmûn Canal, and on the first day of battle, after a severe struggle, they were eventually victorious. In the neighbourhood of Manṣ̂ra, however, they were repeatedly defeated by the young Sultân el-Morazzam Turanshah. Their fleet was destroyed, and 'famine-fever' broke out. Negotiations of peace proved fruitless, and when the ill-fated Crusaders attempted to escape they were intercepted by the vigilant Turks, who thinned their ranks terribly and captured the king with his brother Charles of Anjou and a number of the knights attending them. Lonis thus expresses himself regarding this misfortune in a letter which is still extant: - 'The Saracens with their whole army and in immense numbers fell upon the Christian army during our retreat, and thus it happened that by divine permission, and as our sins merited, we fell into the hands of the enemy. We onrselves, our brothers the counts Alphonso of Poitiers and Charles of Anjou, and all who were retreating with us by land, fell into captivity, though not without many losses by death and much shedding of

Christian blood, and not one escaped'. During his captivity at Manṣ̂ra Louis IX. was treated with consideration, even after the young Morazzam Turanshah had been assassinated before his eyes, and the crown of Egypt had passed from the house of Saladin to the so-called Bahrite Mamelukes (p. cxxiii). On 6th May, 1250, Louis and his barons were released on payment of a heavy ransom, and on surrendering the town of Damietta.

The small mosque of Sanga, near the Russian consulate, contains columus brought from older edifices, with Byzantine capitals of Corinthian tendency, bearing Saracenic arches. The mimbar (pulpit) and ceiling are still embellished with remains of fine wood-carving, which was originally painted. - An unfounded tradition points out an old house of Saladin's time, near the $E l-M u w a ̂ f l k$ Mosque, as the prison of Louis IX.

The town contains no other sights. The palace of the Khedive is a large and unpleasing building.

Excursion to Bbhbit el-Hager. The excursion by boat takes 2 hrs . up the river, and $11 / 2 \mathrm{hr}$. in the reverse direction, so that, including a stay of 2 hrs ., it occupies $6-7 \mathrm{hrs}$. in all. The charge for a good boat is $25-30$ pias.; bad walkers should take donkeys with them. In ascending the stream, the boat passes the town on the left, lying close to the bank of the river. On the right is the village of Góger, also known from an early period as Tell el-Yehûdîyeh ('hill of the Jews'), inhabited by Arabs. Many of the Jews of Manṣ̂ra still cause their dead to be interred here. The next places are Mît Nâbit on the right, and Kafr Wîsh on the left. The Shêkh elBeled (mayor of the village) of the latter place possesses a pleasant garden, which is often visited by the inhabitants of Manṣ̂ura, particularly on feast-days, for the purpose of 'smelling the air'. We land on the left bank at an old bulwark of blocks of limestone and bricks, near the Kantarat el-Wîsh, a bridge across a canal which joins the river here. - From the river to the ruins is a pleasant walk of 40 minutes. The luxuriant trees on the route have quite a European appearance, as they include lime-trees, silver poplars, and willows, besides the sunte-tree, the lebbek, the tamarisk, and the bernûf shrub. We traverse well-cultivated fields, and soon reach the distinct traces of a wall enclosing a heap of ruins, known to the Arabs as 'Hager el-Gâmûs' (buffaloes' stone), which form the remains of the once magnificent Isis Temple of


Hebt. The old Egyptian name of the place is preserved in the modern Arabic name Behb $\hat{\imath} l$. The Copts knew the place by its sacred name of Naisi (raHCs), and the Romans called it Iseum or Isidis Oppidum. On the N.W. side of the ruins of the temple lies the village of Behbît, and adjoining it still exists the sacred lake of the temple. The ruins of the venerable sanctuary of Isis form an imposing and most picturesque mass of blocks, fragments of columns and architraves, ceiling slabs, and other remains, altogether about 400 paces in circumference. The name of Ptolemy II.

Philadelphus I. (B.C. 284-246), the founder of the temple, occurs in several places. The structure must have been a very costly one, as it consisted entirely of beautiful granite, chiefly grey, but partly red in colour, brought from a great distance.

The sculptures (hautreliefs and reliefs en creux) are most elaborately executed. Several of the female heads and busts, and some of the cows' heads also, are remarkably fine. The inscriptions consist of the usual formalæ regarding offerings; none of them are historical. In some the hieroglyphics are unusually_large, in others they are of small and elegant form, and in all they are executed in the somewhat flourishing style peculiar to the age of the Ptolemies. The chief deities revered here were Isis, with Osiris and Horus, besides whom occur Seb and Nut, Hathor and Khunsu, the triad of Sehu, Tefnut, and Anhur, Sebek, Hapi (the Nile), and Anubis in the form of Horus, as the avenger of his father. We may also remark here that Anubis, the martyr, was a native of Naisi, or the Iseum, on the site of which we now stand. On the W. side of the ruins is an interesting large slab of grey granite, veined with red, on which is represented the king offering a gift of land to Osiris and Isis, 'the great divine mistress of Hebit'. Higher up there is another block of grey granite, with a representation of Isis enthroned, and of the king offering to 'his mother' two small bags of the green mineral called mafkat and mestem, or eye-paint. One of the sculptures represents a procession of the gods of the nome, but unfortunately their names are not given. In one case Isis calls the king 'her brother'. Adjoining a figure of the goddess is the inscription :- 'Isis, mistress of Hebit, who lays everything before her royal brother'. On a grey block of granite, lying in an oblique position, is represented the sacred bark of Isis. resembling those seen elsewhere in bronze only. The cabin is like a house of two stories, in the upper of which sits the goddess, with cow's horns and a disk, on a lotus-Hower, and attended on her right and left by female genii with long wings. Each of the genii bears in her hand the feather of the goddess of truth. On the N. side lies an unusually large capital, in granite, upwards of 7 ft . in circumference, embellished with the Hathor mask. Numerous remains of pillars and architraves also still exist.

The ruins of Mendes lie 11 M . to the E . of Manṣ̂ura, whence they may be visited in one day.

## b. From Talkha (Mansura) to Damietta.

## 40 M . Railway in $2-31 / 2 \mathrm{hrs}$. (fare 31 or 15 pias.).

Talkha, a station on the railway from Tanta to Damietta (p.221), lies on the left bank of the arm of the Nile, opposite to Manṣ̂ra (ferry in 5 min., $2-3$ pias.). The train follows the left bank. The land is carefully cultivated in the neighbourhood of Manṣ̂ra, and we observe a number of steam-engines which are used for the irrigation of the soil. The train stops at ( 14 M .) Shirbin, an insignificant little to wn built of crude bricks (branch-line to the W. to Belkâs, 10 M.), at ( 21 M.) Râs el-Khal̂̂g, and at ( $35^{1 / 2}$ M.) Kafr el-Battilkh. The last lies in a monotonous, sandy plain, extending as far as Lake Burlus, and covered in summer with crops of watermelons. An important melon market is held here in July. The rail-way-station of Damietta lies on the left bank of the arm of the Nile (ferry in 5 min.; $5-6$ pias.).

40 M. Damietta. - Hôtel de France (kept by Stasi, a Greek), unpretending, with fair accommodation and food. - European Cafe kept by Costi, a Greek, who also lets a few rooms. - Post Office and Arabic Telegraph Office, - German and Austrian Vice-consuls.

Damietta, Arabic Dumyât, situated between the Damietta branch of the Nile and Lake Menzaleh, about 4 M . from the sea, possesses a harbour, annually frequented by about 500 vessels of small tonnage. Seen from the railway-station, situated near the harbour, Damietta, which now has a population of 34,000 souls, presents an imposing appearance, with its lofty houses flanking the river. The interior of the town, however, by no means fulfils the traveller's expectations. On every side lie ruinous old buildings and walls; many of the houses seem to be uninhabited. There are few European residents here, the insignificant trade of the place being chiefly in the hands of native merchants (Arabs and Levantines). The bar at the mouth of the Damietta arm of the Nile is constantly altered in form by the wind and waves, so that vessels are liable to a long detention in the open roads. Under the most favourable circumstances the navigable channel varies from 6 to 16 ft . in depth. The industries to which the town was indebted for its former prosperity (see below) still exist to some extent, and the traveller will find it interesting to visit one of the streets inhabited by the silk and cotton weavers.

History. Little or nothing is known of the early history of Damietta. It is mentioned by Stephanus of Byzantinm as Tamiathis, a name which has been preserved in the Coptic Tamiati. The town must, however, have been a place of some importance during the Roman period, if we may judge from the numerous and occasionally very handsome columns in the mosques, many of which were found on the spot, thongh others were bronght by the Arabs by sea from Alexandria or Pelusium. Domitian seems either to have visited Damietta, or to have been one of its patrons, as a stone bearing his name, doubtless found in the ancient town, now stands in front of the kâdi's house. At a later period there were probably a good many Christian residents, as a remarkably fine Christian church, which was destroyed by the Crusaders, once stood in ancient Damietta. During the Arabian era Damietta attained a great reputation on acconnt of the resistance it offered to the Crusaders; but the town of that period stood farther to the N. than its modern successor (see below). It was besieged for the first time, but without success, about 1196 by Amalarich and the troops of Manuel, the Greek emperor. Saladin devoted special attention to the fortification of the place. In 1218 Damietta was besieged by King John of Jerusalem with a German, Dutch, English, and French army, under the generalship of the Count of Saarbrück, aided by the knights of three ecclesiastical orders. The Cbristian army, which was afterwards reinforced by a number of Italian troops, is said to have consisted of 70,000 cavalry and 40,000 infantry, and although this account is probably much exaggerated, it was donbtless very numerous. With the aid of an ingenious double boat, constructed and fortified in accordance with a design by Oliverius, an engineer of Cologne, tbe Frisians, Germans, and others of the besiegers succeeded after a fight of twentyfive bours in captnring the tower to which the chain stretcbed across the river was attached. The snccess of the Christians was however considerably marred by the interference of the ambitious, thougb energetic Pelagius Galvani, the papal legate, and by the vigilance of the Egyptian prince Melik el-Kâmil. In 1219 many pilgrims, including Leopold of Anstria, quitted the camp of the besiegers, believing that they had done tbeir duty. At length, after various vicissitudes, the Christians captnred the place. They obtained valuable spoil, sold the surviving townspeople as slaves, and converted the mosques into charches, but in 1221 they were compelled by a treaty to evacuate the town. In 1249, when Louis IX,
landed near Damietta, it was abandoned by its inhabitants, who had set all the warehouses on fire. Without striking a blow, the Crusaders marched into the deserted streets of the fortress, but in the course of the following year they were obliged to restore it to the Saracens as part of the ransom of Louis IX., who had been taken prisoner at Manṣûra (p. 216). During the same year, by a resolution of the Emirs, the town was destroyed, and re-erected on the E. bank of the river, farther to the S., on the site which it now occupies. The new town soon became an important manufacturing and commercial place. Its staple products were leather-wares, cloth, and essence of jasmine, for which it was famous, and its harbour was visited by ships of many different nations. After Mohammed 'Ali's victory over the Turks at Damietta in 1803, he constructed the Mạ̣mûdiyeh Canal with a view to restore Alexandria's ancient importance. Damietta thus lost most of its trade, and its decline was farther accelerated by the foundation of the ports on the Suez Canal.

The town contains no attractions. The principal mosque is a huge, shapeless edifice, the only redeeming features of which are the lofty minarets and the spacious dome. All the houses of more stories than one are provided with handsomely carved wooden jutties and lattice-work, which differ materially in style from the mushrebîyehs of Cairo. The principal street, which is upwards of 1 M. long, forms the busy and well-stocked bazaar of the place. Damietta contains a Roman Catholic and a Greek church.

An interesting excursion may be made to the mosque of El Gebâneh, situated near a cemetery, to the N. of the town (see below). The building appears to date from the period of the old town of Damietta, and has Cufic inscriptions in frout. The interior contains numerous columns dating from the Roman period, the bases of which are about 3 ft . below the level of the pavement of the nave. Two of the columns bear curious inscriptions. Some of the shafts are of beautiful verde antico, and others of porphyry. The capitals, including several in the Corinthian style, are partly of Roman and partly of Byzantine workmanship. Two columns standing on the same base are believed, like those in the Mosque of 'Amr at Cairo, to possess miraculous powers. (Fever-patients, for example, are said to be cured by licking oue of them.) The minaret is embellished with early Arabian ornamentation.

About $3 / 4 \mathrm{M}$. farther from the town is a hollow contaiuing a cemetery and a number of brick houses. The soil here and on the slopes of the adjoining hills is of a dark-red colour, whence the place derives its name of Bahr ed-Dem, or 'sea of blood'. According to tradition, 30,000 martyrs of El-Islâm were once massacred here. The neighbouring hills, particularly those on the right, are called Tell (plur. tulul) el-‘Azm, or 'hills of bones', being said to contain multitudes of human skeletons. Reminiscences of the siege of Damietta by the Crusaders in 1219 , and of the victory gained here by Mohammed 'Ali over the Turks in 1803, are curiously mingled in the minds of the natives, and have given rise to various unfounded legends. It is not improbable that part of ancient Damietta once stood on the Tell el-Azm.

In the environs, especially in the direction of Lake Menzaleh, are extensive fields of rice, the harvest of which takes place in Sept. and Oct. The fields are intersected in every direction by cuttings and canals, which are crossed by nnmerous bridges for the use of the cattle. Cows are extensively reared here, and the milk and butter of Damietta are the best in Egypt. A walk in the environs will be found interesting. The fields are pleasantly shaded at intervals with plantations of sycamores, Cordia, and other trees. The ditches are filled with beautiful white and blue water-lilies (Nymphæa Lotus, N. cærulea, and N. stellata) and other aquatic plants. The larger canals are bordered with lofty reeds, the haunt of the ichneumon, which often surprises the traveller by its tameness. Notwithstanding its girdle of inundated plains, canals, and lakes, Damietta enjoys a remarkably healthy climate at all seasons. The atmosphere is never so damp here as at Alexandria, which lies in more immediate proximity to the sea, and even in the height of summer it is often refreshingly cool.

A trip by boat down to the Mouth of the Nile (Bôghaz) takes $3-31 / 2 \mathrm{hrs}$., or, if the wind is favourable, $11 / 2 \mathrm{hr}$. only (fare 20 pias.). Numerous dolphins will be observed in the river near its mouth.

From Damietta to Rosetta (p. 225), viâ Lake Burlus (Burollos), a route which is not recommended, takes 2-3 days at least, and sometimes much longer.

## c. From Damietta to Tanṭa.

72 M . Rallway in $31 / 2-3^{3} / 4 \mathrm{hrs}$. (not including detentions); fare 54 or 27 pias., return-ticket 82 or 41 pias. To Mahallet-Rûh (junction of the line to Desûk) in $3^{1 / 4}-31 / 2 \mathrm{hrs}$. ; fare 47 or 30 pias.

From Damietta to ( 40 M .) Talkha (Mansura), see p. 218. Beyond Talkha the train runs at a little distance to the $W$. of the Damietta arm.
$501 / 2$ M. Semmentid, an uninteresting little town, consisting of a densely packed mass of low mud-hovels (no inn). The ruins of the ancient Sebennytus, the site of which is now occupied by Semmenûd, are also insignificant. The old Egyptian name of Sebennytus was Teb-en-nuter, which the cuneiform inscriptions render Zabnuti (Coptic Jemnouti and Sebennetu). It was the capital of the nome of Sebennytes Superior, in which Manetho (p.civ) is said to have been born.

Crossing several canals, the train runs towards the S., and stops at ( 56 M .) Mahallet el-Kebîr, a populous commercial town, with numerous European houses, cotton-cleaning mills, and an interesting old synagogue. The next stations are ( 63 M .) Mahallet Rah, the junction for Zifteh and Desûk (see below), and ( 72 M .) Tanṭa (see p. 24).

From Mahallet Rụ̣̂ to Ziftei, $181 / 2$ M., branch-line in $11 / 2 \mathbf{h r}$.; fare 15 or 7 piastres. Stations: Korashîyeh, Gemzêh, Sonta, and Zifteh, which lies on the left bank of the Damietta arm.

From Mahallet Rûth to Desôk, 32 M ., railway in $11 / 2-21 / 4 \mathrm{hrs}$.; fares 26, 13 pias. (from Tanta 33 or $161 / 2$ pias.). - The train runs towards the N.W., crossing numerous canals. Stations: 10 M. Kotur; 19 M. Kalin, whence a branch diverges to ( $101 / 2 \mathrm{M}$.) Kafr-esh-Shékh; $251 / 2 \mathrm{MI}$. Shabbâs. 32 M . Desulk, on the right bank of the Rosetta arm, which is here of considerable width. No accommodation is procurable here, and it is not easy to hire a boat for the whole journey to Rosetta. A small boat may, however, be hired as far as $F a \sim$, where a larger craft for the rest of the route is more easily obtained. - On the opposite bank of the Nile, $13 / 4 \mathrm{M}$.
above Desûk lies Er-Ramanîyeh, the terminus of a railway from Damanhûr (p. 24; 12 M . in $30-40 \mathrm{~min}$.).

## d. Sairs.

From the Kafr ez-Zaiyat station (p. 24) an excursion may be made to Sâ el-Hager, the site of the ancient Saïs; but there is no great inducement to visit the place, even for the scientific traveller. A donkey may be hired at Kafr ez-Zaiyât. For a party it is pleasanter and cheaper to make the excursion by boat (easily procured; fare for two days about $\mathscr{L} \mathrm{E} .1$ ). The journey by land takes 5 hrs , by water $3-8 \mathrm{hrs}$., according to the wind.

A little to the N . of Kafr ez-Zaiyât the river describes a long curve; and somewhat farther to the N., on the W. bank, a little inland, but visible from the water, rise the ruins known as $E d$ Dahariyeh, a series of heaps of debris which mark the site of a town of considerable size. On the W. bank, farther on, is the pleasant village of Nakhleh. The village of S $\hat{a}$ el-Hager (on the E. bank), at which we disembark, lies to the $\dot{\mathbf{S}}$. of the ruins.

The ancient Sais is mentioned in history at a very remote period, and as early as the 18 th Dynasty it was regarded as a cradle of sacerdotal wisdom. The goddess Neith, whom the Greeks identified with their Athene, was the tutelary deity of the place. She was one of the maternal divinities, a manifestation of Isis ( $p$. clvii), and was named the 'great cow' which gave birth to the sun. She was worshipped both by the Egyptians and the Libyans. On the Roman coins of the Saïte Nome is seen a figure of Minerva with an owl in her right hand and a lance in her left. It was this identification of Neith with Athene that probably led Pausanias to suppose that Pallas-Athene originally came from Libya, to which Saïs was frequently considered to belong. According to an ancient tradition, Athens is said to have been founded by Cecrops of Sais, and a fanciful corroboration of the myth is sought for in the fact that the letters of A-neth-a and Athena are identical. Most of the Greek scholars who repaired to Egypt for purposes of study went either to Heliopolis or to Saïs. According to Plato, Solon associated here with the learned men of Egypt, Herodotus obtained much information here, and the fame of the Saite knowledge of mysteries was maintained down to a late period. The 26th Dynasty originated in the city of Neith, and its kings were specially devoted to that goddess, to whom they erected monuments of great splendour. Cambyses also visited Saïs after his conquest of Egypt, and showed himself favourable to the temple of the goddess and her rites. It is not known when the town was destroyed. It was probably an episcopal see at a very early period.

There is now no trace of the famous buildings erected here by Amasis and others (p. cxii), or of the chapel formed of a single block of granite brought from Elephantine to Saïs, which must have weighed at least 250 tons. The site of the temple of Neith, which was connected with the royal palace and with a mausoleum
for the Pharaohs of the 26th Dynasty, cannot now be identified with any certainty. The columns with palm-capitals, the tomb of Osiris, the obelisks, statues, and androsphinxes, mentioned by Herodotus, have all entirely disappeared. The sacred lake, however, on which, according to Herodotus, mystery-plays were acted at night in honour of Osiris, is probably identical with a sheet of water to the N. of a huge wall enclosing an open space, on the E. side of which the wall is upwards of 500 yds . long and nearly 65 ft . in thickness. The outline of the lake was probably once elliptical, but is now of very irregular form. On its S.E. side rise vast heaps of rubbish, marking the site of the royal palace and the temples connected with it. Mariette's excavations at this spot brought a few antiquities to light, but led to no discovery of importance.

## e. Rosetta.

44 M. From Alexandria to Rosetta by railway in $21 / 2-31 / 2 \mathrm{hrs}$; fare 34 or 17 pias., return-ticket 51 or 25 pias. Trains start from the Principal Station (p. 21).

From Damanhôr (p. 23) to Rosetta is a journey of one day only, but the start should be made at an early hour. As far as Fumm el-Mahmûdîyeh a donkey takes $21 / 2-3 \mathrm{hrs}$. (charge $15-18$ pias.) ; thence to Rosetta by boat in $5-7 \mathrm{hrs}$., according to the wind (about $\mathscr{E} \mathrm{E} .1$; or, including stay, which must be specially bargained for, and return, about double that sum).

From Alexandria to Rosbtta the railway skitts the coast. The famous towns which lay on this coast in ancient times have entirely disappeared. As far as Sidi Gaber (p. 22), the second stoppingplace, the train runs parallel with the railway to Cairo, which then diverges to the right, while our line follows a N.E. direction. The next station of any importance is ( $61 / 2$ M.) Ramleh (p. 22; the station lies $1 / 2$ M. to the E. of the town). Near ( $91 / 2$ M.) El-Mandara the train enters upon the neck of land which separates the Lake of Abukîr (Behêret Maradîyeh) from the Mediterranean.

14 M. Abukir, an insignificant village, famous for the naval battle of 1st Aug., 1798, in which the British fleet under Nelson signally defeated the French, destroying thirteen of their seventeen vessels. On July 25th, 1799, Bonaparte repulsed the Turkish army here; and on March 8th, 1801, Sir Ralph Abercromby defeated the remnants of the French army, and compelled the evacuation of Egypt.

The ancient cities of Heracleopolis and Canopus were situated on this neighbourhood; and excavations begun in 1893 were highly successful, the rich results being now in Alexandria. The city of Ganopus, which, according to the decree of Tanis (p. 228) passed here, was known by the sacred name of Pakot, and by the popular name, still existing in the Coptic langnage, of Kahen-Nub, or 'golden soil', was a very famous place in ancient times. The resemblance of the name Kahennub to Canobus, the helmsman of Menelaus, gave rise to the Greek tradition that that pilot was interred here. Strabo describes the pleasure-loving town as follows: 'Canobus is a city which lies 120 stadia from Alexandria, if one goes by land, and is named after the helmsman of Menelaus who died there. It contains the highly revered temple of Serapis, which, moreover, works such miracles that even the most respectable men believe in them, and either sleep in it themselves, or get others to sleep there for them. Some persons also record the cures, and others the effects of the oracle-dreams
experienced there. A particularly remarkable thing is the great number of parties of pleasure descending the canal from Alexandria; for day and night the canal swarms with men and women, who perform masic on the flate and licentions dances in the boats with unbridled merriment, or who, at Canobus itself, frequent taverns situated on the canal and suited for such amusements and revelry'. - The 'Canopic vases' derive their name from this place.

On the shore of the semicircular bay of Abukîr are several small forts, and on the promontory rises a lighthouse. The train continues to traverse the narrow neck of land between the Lake of Abukîr and Lake Edku beyond it, on the right, and the Mediterranean on the left. Stations ( $201 / 2$ M.) El-Máadîyeh, near the former Canopic mouth of the Nile (p. lix), and ( $281 / 2$ M.) Edku, a village situated on a sand-hill to the right. The train finally traverses a dreary expanse of sand, and reaches ( 44 M .) Rosetta ( p .225 ).

From Damanhû́r to Rosbtta. We leave the ruins of Kôm ez-Zargûn to the right, and in $11 / 4 \mathrm{hr}$. reach the Mahmûdîyeh Canal (p. 23), which lies between lofty banks, and is traversed by barges and small steamers plying between Alexandria and Rosetta. We follow the bank of the canal, and about $1 / 2 \mathrm{M}$. from Fum el-Mahmûdîyeh reach two rows of remarkably fine trees, under the shade of which we continue our route. Near Fum el-Mahmûdîyeh, where the canal receives its supply of water from the Rosetta arm of the Nile, its banks are lined with solid brick masonry, and at this point we observe a number of barges awaiting the opening of the lock-gates which separate the canal from the river. The engines by means of which animpetus is given to the water so as to cause it to flow towards Alexandria are four in number, each being of 100 horse-power. The canal, which connects Alexandria with Cairo and the Delta, and at the same time supplies the former city with water from the Nile (see p. 14), was constructed by Mohammed 'Ali in 1819 at a cost of $71 / 2$ million francs. In the execution of the work he employed the forced labour of 250,000 fellâhîn, of whom no fewer than 20,000 are said to have perished from disease and over-exertion.

The banks of the Rosetta arm are monotonous, but are enlivened by a considerable number of towns. The first place on the right bank is Sindyûn, with a handsome minaret. Opposite to itis Dêrût. The angular pieces of wood at the top of the minarets are used for bearing lamps onfestive occasions. Numerous pumps are observed on the banks. The next places on the left are Minyet-es-Sa'id and Fezâr, and on the right Shemshir ; then, on the left, Adfineh, with a palace erected by Sa'îd Pasha, and on the right Metûbis. Farther towards the N., Dîbeh lies a little to the left, and on the right are Kuni, Minyet el-Murshid, and the little town of Berimbâl. On the same bank are Yeggârin and the village of Kasha, and opposite, to the left, is the town of Mahallet el-Emir, crowned with two minarets. On the right we next observe Faras, and on the left Shemins-
meh and El-Khimmâd; then, on the right, El-Bassreh, and on the left, El-Gedìyeh. The citadel of Rosetta (Reshîd), usually known as the Kal'a ('castle') next comes in sight. Near it, also on the left, we observe a fine grove of palm-trees rising close to the town, and the hill of Abu Mandûr (see below).

Rosetta, Arabic Reshîd (a Coptic name, Ti Rashit signifying 'city of joy'), the ancient Bolbitine, with 16,660 inhab., almost exclusively natives, lies at the mouth of the Bolbitinic arm of the Nile, which was also called the Taly (Tálo). As the Rosetta Stone (see below) was found near Fort St. Julien, 4 M. to the N., it is supposed that the ancient town lay in that neighbourhood. - There is no inn at Rosetta, but, if necessary, the traveller may apply for accommodation to the hospitable Franciscan monks.

History. Little is known regarding the early history of the town. It was founded on the site of the ancient Bolbitine, and early in the middle ages attained considerable mercantile importance. It continued to flourish down to the beginning of the present century, butits prosperity declined rapidly in consequence of the construction of the Mahmûdiyeh Canal and the improvement of the harbour of Alexandria.

The town possesses numerous gardens, which yield excellent fruit. The hill of Abu Mandûr, to the S. of the town, which commands a fine view, is supposed by some topographers to have been the site of the ancient Bolbitine. The interesting streets contain many small, but substantial houses in a peculiar, half-European style, with projecting stories and windows towards the outside. Numerous columns from edifices of the heathen and Christian periods, many of them of granite and some of marble, are seen lying in various open spaces, particularly in one of considerable size near the river, and a number of others are built into the houses. The very spacious Mosque of Sakhlûn is embellished with many ancient columns, but is otherwise uninteresting. The fortifications to the N . of the town are not shown except by permission of the commaudant. In 1799 M. Bouchard, a French captain of engineers, discovered in Fort St. Julien the celebrated Rosetta Stone, which afforded European scholars a key to the language and writing of the ancient Egyptians, which had been lost for nearly 14 centuries.

The Rosetta Stone, now preserved in the British Museum, is a stele of black basalt, the corners of which are unfortunately damaged, bearing three different inscriptions on its face. The subject is the same in each case, but the first is in the sacred hieroglyphic language and character of the ancient Egyptians, the second in the demotic, or popular, language and writing, and the third in the Greek language and character. The 54 lines of the Greek text, which is written in 'uncial' letters, are well preserved, but of the 14 hieroglyphic lines all on the right side and twelve on the left are seriously damaged. The subject of the inscription is a decree of the priests in honour of Ptolemy V. Epiphanes (B. C. 204-181), issued on 27 th March, 195 , when the king was still a boy of fourteen. The highsounding titles of the king, the date, and the place (Memphis) where the resolution was passed are first set forth in eight lines. Next follow in twenty-eight lines the motives which induced the hierarchy to issue the decree, - viz. the numerous benefits conferred by the king on his country, the gifts presented by him to the clergy and the temples, the reduction
and remission of taxes, the indemnity granted to criminals, his leniency towards the rebels who had 'returned to peace', his vigorous resistance to enemies approaching by land and by sea and to the town of Lycopolis, his prudent conduct on the occasion of an inundation which took place in the eighth year of his reign, and his liberal contributions towards the snpport of the sacred animals and the repair and adornment of the temples. The remainder of the inscription gives the resolution itself, to the effect that a statue, a chapel of gold, and an image of the king should be placed in every temple, decorated on feast-days, and revered; and farther, that the decree, inscribed on a slab of hard stone in hieroglyphic, demotic, and Greek writing should be placed in every temple of the first and second rank. - The last paragraph of the Greek inscription informs us that we shall find the two translations, one in the sacred, the other in the popnlar language of the Egyptians, adjacent to it. The first step towards deciphering these last was to endeavour to discover the alphabet of each kind of character. The demotic part was first scrutinised, and M. S. de Sacy and Hr. Ackerblad, a Swedish scholar, first succeeded in determining the groups which contained the word Ptolemy. In the hievoglyphic part ( p . cxxxii) some of the groups were framed, and, as had been ascertained from the Roman obelisks and other sources before the finding of the Rosetta Stone, it was inferred that these were names of kings. Dr. Th. Young, an Englishman, and M. F. Champollion, the French Egyptologist, then succeeded, independently of each other, the former in 1819, the latter in 1822, in discovering the missing alphabet by means of a comparison of the names of the different kings. Champollion afterwards prosecuted his researches with snch marvellous success, that he justly merits the highest rank among the decipherers of hieroglyphics. Taking the framed group which recurred most frequently on the Rosetta Stone to be Ptolemaios, as the Greek inscription indicated, he compared it with other framed symbols on an obelisk found at Philæ contemporaneously with the Rosetta inscription. The symbols on the obelisk, which occnrred in connection with the name of Ptolemy, he conjectured to signify Cleopatra, as the number of letters also indicated. He then proceeded to compare the two groups: -


The first symbol in the second of these groups is a triangle, which he supposed to represent $k$, and which does not occur in the first group (Ptolemy). The second symbol in the second group, a lion, he took to be $l$, and he was confirmed in this view by the fact that the same sym. bol occupied the fonrth place in the first group. The third symbol in the second group, a reed, according to his hypothesis, would be e, and this again was confirmed by the two reeds in Ptolemaios, representing the Greek diphthong ac. The fourth symbol in the second group, a cord with a loop, was also, according to his expectation, found to occupy the third place in the first. So, too, the square, representing $p$ in the second group was found to correspond with the first letter of the first gronp. The sixth letter of the second gronp, a bird, did not occur in the first gronp, but was repeated in its proper place in the second. The seventh sign in the second group, a hand, would be $t$, but the same letter was represented in the word Ptolemy by a semicircle. This discrepancy might have misled the decipherer, had he not rightly conjectured that two different symbols might possibly exist for the same letter, and that the semicircle at the end of Cleopatra represented the Coptic feminine article $t$, which, as he afterwards found, is placed at the end of many female names. The eighth letter in the second frame he took to be $r^{\prime}$,
and this letter did not occur in the first frame. By this process the nine letters of Cleopatra's name, or ten inclnding the article, were ascertained, while the different letters in the case of Ptolemy were afterwards verified by comparing them with the names of other kings, and particularly with
that of Alexander the Great


The
other steps in the task of deciphering the hieroglyphics have already been noticed at p. exxxiii.

## f. Șân (Tanis).

A visit to the ruins of Tanis is somewhat tedious and troublesome, and will not repay the ordinary traveller. A dragoman, a tent, and rugs for the journey are desirable. The usual plan is to take the train to Tell Fakus (p. 216), arriving about midday, spend the night at the cotton-factory near Mît el-f Azz (introduction desirable), and start early next morning with guide and donkeys so as to reach $S A n$ in the evening. The return may be made by the same route or viâ Sinbelâwîn (p. 216), which lies a day's ride from Sân. - Down to the middle of January, that is before the Nile is too low, the traveller may proceed by the Mu'izz Canal from the $A b d$ Shekak station (p.216) to Sân, in a boat previously ordered by the dragomain. Ș̂an may be reached the same day ( $7-8 \mathrm{hrs}$., but more in the reverse direction), and the night should be spent in the boat. The boats are large, but dirty. The charge for the voyage to Șân is about $\mathscr{E E} .2$, and for the journey there and back $\mathscr{E E}$. $3-4$, including stoppages, which must be specially stipulated for.

Tell Fâkûs (railway-station), see p. 216. The scanty ruins here are interesting to Egyptologists only. They bear a few inscriptions, some of which date from the period of Ramses II.

To the N. of Tell Fâkûs, on the Bahr Fakus, near the hamlet of Khataanah, are the ruins of a large town; buildings dating from the time of the 12th Dyn. and of the Ramessides have been discovered here by Naville. - About 30 M . to the N. of Khataanah, near the village of Kantir, stood a temple built by Ramses II.

At Tell Fâkûs we cross the canal and in about 25 min., near the modern Mît el-cAzz, reach a cotton-factory belonging to an Egyptian bey, where an introduction will secure quarters for the night. Donkeys and a guide should be ordered for an early start next morning.

The route to Şân traverses fertile fields, chiefly planted with cotton, and frequently intersected by ditches and cuttings, overgrown with reeds and marsh-plants, through which the traveller must ride. The distance to be traversed depends on the state of the water, and the route varies at different seasons. The villages resemble those on the Upper Nile, except that there are no large dovecots here. About noon we reach the margin of the desert, on the parched and cracked surface of which there are occasional pools of salt water. Towards sunset we regain the cultivated land, and, after a good deal of waiting and shouting, are ferried across the Mu'izz Canal. We then either pitch our tent among the ruins of the ancient Tanis, or ask hospitality of the wealthy farmer (shêkh) of the fishings. Insect-powder should not be forgotten.
 Tanis.

Tanis (Egypt. Zánet), the $Z \bar{a} n$ or Zoann of the Bible, one of the most important towns of the $E$. Delta, was situated on the arm of the Nile named after it (the modern Bahr Mu'izz), with which many ancient legends are associated. Thus it was by the Tanitic arm of the river that the body of Typhon (Seth), when slain by Osiris, floated down to the sea.

We learn from the Bible (Numbers xiii, 22) that Tanis was founded seven years later than Hebron, which, however, is mentioned as having been a very ancient place as early as the time of Abraham. Under the 6th Dyn., and probably even earlier, Tanis possessed an important temple of Seth, its local deity, to which considerable additions were made by the kings of the Middle Monarchy. Under the 18th Dyu. the ancient town seems to have suffered an eclipse and even its temple seems to have fallen into decay; but it awoke to new importance under the monarchs of the 19th Dyn., especially under Ramses II. That king seems to have chosen Tanis as the second royal residence, Thebes being the first; and on the site of the ancient temple he reared a new and larger sanctuary, which he adorned with the still extant colossi, columns, and obelisks of earlier kings, whose names he in most cases unscrupulously deleted and replaced by his own. The temple, 1000 ft . in length, was entered from the W. Beside the doorway stood a colossul statue of the king, of probably unrivalled size $(80-100 \mathrm{ft}$. in height), which towered high above the surrounding buildings. A colonnade led from the gateway to an avenue of obelisks alternating with statues of the king, and thence to a second avenue of statues of earlier monarchs, beyond which the sanctuary proper was reached by means of a passage, 30 ft . in width, flanked on either side with walls. In front of the temple rose four large obelisks, and the portico was constructed of columns brought from some earlier edifice. At the E. end of the sanctuary rose two other obelisks.

Shortly after the death of Ramses II., this temple also fell into decay; the gateway and the colossus of the king were destroyed; and the same fate overtook the colonnade preceding the shrine. Under the 21st Dyn. Tanis again rose to political importance and its temple was restored. King Siamon re-erected the colonnade and adorned the sanctuary proper; while Psusennes surrounded the entire temple-precincts with a massive wall, about 45 ft . in height and 70 ft . in thickness, with gateways on the $N$. and on the $W$. This wall had a total length of 3400 ft . and contained not less than 20 million bricks, each one of which was stamped with the name of the royal builder. Sheshenk 1II., of the 22nd Dyn., built a new gateway on the site of the ruined gateway of Ramses, utilizing as building-material the broken fragments of the colossus of Ramses that had formerly stood there. No remains have been identified of any buildings raised by the kings who dwelt at Tanis in the 8 th cent. B.C.; but we know that the temple of Tanis must have been of considerable importance at the beginning of the 7th cent., as tbe Ethiopian monarch Tirhaka caused an inscription to be placed here, announcing his accession to the throne of Egypt. At a later period Tanis and its temple began once more to decline, while Saïs and Naucratis, in the W. Delta, were flourishing; but in the 4th cent. B.C., in the reign of Nektanebus, a member of the last native dynasty, it enjoyed a final flicker of prosperity, In the Græco-Roman period, the great temple received no farther additions, and the inhabitants of the town began to build their houses and huts within the sacred precincts.

Around the grey plateau of the town rises a series of hills, nearly forming a circle, and once covered with dwelling-houses. The temple built by Ramses II., which occupied the centre of the town, is now represented by a heap of confused ruins. Only granite and sandstone fragments of the ancient buildings are 10 w left, for the limestone, which was the material chiefly used, has all been removed, partly to be converted into lime, partly to be used in the construction of other buildings. The first excavations at Tanis were
undertaken in 1860 by Mariette, who discovered a number of importantmonuments, including the so-called Hyksos-Sphinxes, now in the Gizeh Museum (p. 103). Prof. Flinders Petrie, on behalf of the Egypt Exploration Fund, also carefully examined the site in 1884.

If we approach the ruins from the $W$., we first pass various fragments of large statues of Ramses II., and then reach the extensive gateway built by Sheshenk III., of which a portion is still standing on the $S$. side. About 50 ft . beyond this gateway lie remains of the huge monolithic granite columns of the colonnade of Ramses II.; one column, 36 ft . in length, is still unbroken. The obelisks which terminated the colonnade on the E. lie in shattered fragments on their original site. The next object is a broken sphinx in red granite, the companion-piece of which is now in the Louvre. This sphinx was originally erected by a king of the 12 th Dyn., but an unknown king of the 13 th Dyn., and also Merenptah (19th Dyn.), Siamon (21st Dyn.), and Sheshenk I. (22nd Dyn.), all subsequently inscribed their names upon it. Farther on are fragments of the obelisks and colossi of Ramses II. On the N. side are some remains of the so-called Hyksos Sphinxes, which were erected by Amenemba II. (12th Dyn.), but which were 'usurped' and provided with fresh inscriptions by various subsequent Pharaohs, including a Hyksos king. The faces of the sphinxes are portraits of Amenemha. Amongst the remains of the statues of his predecessors erected in two rows by Ramses II., the following should be noticed: Colossal head from a granite portrait-statue of Amenemba III. (12th Dyn.); fragment of a statue in black granite of Usertesen I. (12th Dyn.), with the name of Merenptah on the shoulder; statue of Sebekhotep III. (13th Dyn.); two seated statues in black granite, over 12 ft . high, of Mermesa, a king of the 13th Dyn., 'usurped' successively by the Hyksos king Apepi and by Ramses II. - The temple proper is completely ruined. In front of it are remains of the colonnade, including columns with lotus-capitals, from the 12 th Dyn.; columns of Ramses II., with representations of the king praying before Egyptian deities; and bases of columns dating from the time of Siamon.

About 8 M . to the $\mathrm{S} . \mathrm{E}$. of Tanis, and 9 M . to the N.W. of Sâlihîyeh (p. 216), lie the mounds of debris known as Nebesheh, the ancient Egyptian Fmt, the capital of the 19th nome of Lower Egypt. These were excavated in 1886, at the instance of the Egypt Exploration Fund, by Mr. Flinders Petrie, who discovered the remains of a temple built by Ramses II., with the aid of older monuments, and a sanctuary of the towngoddess Buto, founded by Amasis. In the cemetery, among the Egyptian tombs of the 19th Dynasty and later, were found the graves of Cyprian mercenaries stationed here under Amasis.

From Port Saido (p. 213) to Tanis, across Lake Menzaleh (p.213), is a voyage of $15-35 \mathrm{hrs}$., according to the wind. No fixed fare. On the island of Tenîs are the ruins of the ancient Tennis, most of which appear to date from the time of the Crusades. The ruins on several other islands indicate that a great part of the lake was once cultivated land, sprinkled with towns (p. 213). We at length quit the lake and enter the Murizz Canal (p. 215), the ancient Tanitic arm of the Nile, and in 1-2 hrs. more we disembark opposite to Şân.

## 15. The Peninsula of Sinai.

The journey to Mount Sinai is perhaps the mostinteresting of Oriental expeditions, particularly to the student of the Biblet, as he will traverse nearly the same route as that of the Israelites described in the Bible (p. 237). The peninsula of Mt. Sinai owes its imperishable fame to the vicissitudes undergone by these wanderers under the leadership of their great lawgiver; but the scenery is also so varied that it will amply repay the traveller for all the privations of his journey. The usual duration of the Mt. Sinai expedition is 17-20 days (comp. p. 233).

The best Season for the journey is between the middle of February and the end of April, and between the beginning of October and the middle of November. During the months of November, December, and Jannary the nights are generally very cold, while in summer the glare of the sun, reflected from the granite rocks of the Sinai mountains, is very oppressive. Even at the end of May the weather is hot, and the Khamsinn (p.lxviii) prevalent (setting in sometimes as early as April), but at this advanced season the traveller will have the advantage of seeing the manna (p. 257), or fruit of the tarfa shrub, in its ripe condition.

Preparations. All the preliminaries for the journey must be arranged at Cairo, where alone are to be found the necessary dragomans and the Shêkhs of the Tâwara Beduins (p. 235), who act as guides and let camels during the travelling season. The first thing is to engage a good Dragoman (p. xxi), who provides camels, tents, bedding, blankets, and provisions. All these should be examined at Cairo, and the tents pitched by way of experiment. The more carefully this inspection is made, and any defects remedied, the less likelihood will there be of subsequent annoyance. The promises of Orientals are not to be trusted.

The cost of the journey for a party of 3-4 persons, including camels, tents, accommodation in the monastery of Mt. Sinai (and at the Hotel at Suez if necessary), provisions (exclusive of alcoholic liquors), the dragoman's fee, and all gratuities payable to attendants, will amount to $13 / 4-2$ EE. a day for each person.

The following Contract will probably meet the requirements of most travellers.

Contract. Mr. X. and his travelling companions on the one hand, and the Dragoman Y. on the other, have mutually entered into the following contract:
(1) The Dragoman Y. binds himself to conduct Mr. X. and his party safely through Arabia Petræa to the Monastery of Sinai, and back, by the following route $\ldots$ (naming the principal points), at a charge of ... piastres per day. For the three days, during which the camels are travelling from Cairo to Suez the Dragoman shall receive one-third only of the stipulated daily charge. The Dragoman Y. undertakes to await at Suez the arrival of the travellers, in perfect order for starting, on the ... day of the month of ... The day of starting from Suez shall be deemed the first complete travelling day.
(It is advisable to lay down the whole route very precisely, mentioning also the valleys which have to be traversed, but the stages must of course depend on the situation of the springs. We may again mention here that the Orientals, and the Beduins in particalar, attach no value whatever to their time, so that little or no compensation need be made

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for delays. For each day after the first twenty days, reckoned from the starting of the camels, and also for days of rest, the daily charge may generally be reduced.)
(2) The whole travelling-expenses of the party, for the joarney by land and by water, camels, boats, etc.; for food, for tents, or for accommodation at hotels (to be chosen by Mr. X.) in case of any stay at Suez; for lights, service, gaides, bakshîsh to all persons whatsoever, and particularly the fees for escorting the party paid to the Beduins whose territory is traversed, shall be defrayed exclusively by the Dragoman Y., who shall also bear all outlay for the stay in the Monastery, including the usual contributions to the monks. Each traveller shall be entitled, without extra charge, to $1 / 2-1$ bottle of wine per day, but Mr. X. shall provide any spirituous liquors required by the party. (Or the party may prefer to purchase their own wine, as well as spirits, in which case the Dragoman Y. shall be required to carry it free of expense. A few bottles of good claret or Burgundy, and of Cognac, should also be taken by each traveller to mix with the water, which is often unpalatable, or to be used in case of illness.)
(3) The Dragoman Y. shall provide a good cook, and a sufficient number of servants, and shall take care that they are always polite and obliging to Mr. X. and his party, and that they are quiet at night so as not to prevent the travellers from sleeping, and he shall also maintain order among the camel drivers, as well as the other attendants. The Dragoman Y. also undertakes to be himself at all times obliging to Mr. X. and his party ( $p$. xxi), and to comply with all their wishes so far as possible.
(It is customary for the attendants to ask a bakshish for every trifling service, but no attention should be paid to their demands. Another bad habit of theirs, to be carefully provided against, is that of tying up their beasts too close to the tents, and of chattering beside them half the night.)
(4) The Dragoman Y. shall provide ... tents for $2-3$ persons each (to which may be added, if required, a tent to be used by the whole party during the day), and for each traveller a complete bed with clean mattresses, blankets, sheets, and pillows; each person shall have two clean towels every five days, and clean sheets once a week. A sufficient supply of water for washing shall be supplied every morning, and as much drinking water per day as the traveller desires.
(The Beduins of Sinai carry the water in small, long-shaped casks. The traveller will find it convenient to have one of these appropriated to his private use. Kollehs are best for keeping the water cool, bat are easily broken.)
(5) The traveller's breakfast shall consist daily of eggs, with tea, coffee, or chocolate; luncheon shall consist of cold meat (roast-meat, fowls, etc.), and fruit; dinner, at the end of the day, shall consist of . . . courses. The travellers shall be provided with oranges and dates whenever they desire.
(The traveller may adjust the bill of fare according to his taste. As the air of the desert is bracing, a liberal diet should be prescribed; preserved meats may also be stipulated for. Nothing is to be had on the route except at the monastery, where rice, lentils, bread, dates, and excellent date-brandy may be purchased. The dinner hour should always be fixed for the evening, after the day's journey is over.

It need hardly be said that wine and spirits are apt to make the traveller drowsy in hot weather. Cold tea quenches the thirst better than anything else. The bread which the dragoman proposes to take should be tasted beforehand. The Arabian bread, consisting of thin, round cakes, is only palatable when fresh, so that a supply of European bread should be stipulated for. - An abundant supply of ordinary tobacco (p. xxxi) should be taken to give the attendants and Beduins, but the traveller should beware of being too liberal with it at first, lest this attention should be demanded as a right.)
(6) The Dragoman Y. shall provide a sufficient numbe of good and
serviceable camels; the riding camels (see below) for Mr. X. and party may be tried by them before starting, and in case they do not suit, may be exchanged for others. The same stipulation applies to the saddles (the condition of which should be carefully examined).
(7) In case of the illness or death of any of the camels, Mr. X. and party shall to no extent be responsible.
(8) Neither the Dragoman Y. nor the Arabs, who escort the travellers; shall, without the special permission of Mr. X., allow anyone whomsoever to join the party.
(9) The Dragoman Y. binds himself to condnct Mr. X. and party to any point within Arabia Petrea which they may desire to visit, to allow them to break their journey, whenever, and for as long a time as they may wish, and to provide each member of the party, when making excursions off the main route, with guides and luncheon. The Dragoman Y. shall not, however, be bound to provide more than one dinner, and one lodging for the night for the party.
(10) The Dragoman Y. forfeits all claim to payment for any day when he is the cause of a stoppage for more than half a day; but no such forfeiture shall take place, if Mr. X. himself, or unfavourable weather, should be the cause of the delay. Any accidents happening to the camels, or difficulties caused through the fault of the Arabs, shall be reckoned among the delays for which the Dragoman $Y$. is answerable.
(This last stipulation is quite fair, as the Arabs in Arabia Petrea can always procure fresh camels within a few hours.)
(11) The day for starting from Snez shall be the ...th day of ...; for any postponement caused by the Dragoman Y., contrary to the wishes of $M_{r}$. X. and party, he shall be liable to a fine of $\mathscr{E} E . .$. per day.

The Camels nsed for riding are of an entirely different race from the camels of burden, and are called 'Hegîn', or in Syria 'Delûl' (i.e. docile). The Delûls, properly speaking, are selected animals of noble breed, and very superior to the ordinary camel (called gemel) of the caravans. The saddle, which is placed upon the hump of the animal, consists of a kind of wooden frame, from which two high round crutches project in front and behind. Upon the frame is placed a leather cushion (which is rendered more comfortable by the addition of rugs), and in front of the foremost crutch there is a second cushion. The traveller sits with one leg round the foremost crutch, somewhat in the way in which ladies ride, and rests the heel of one foot against the instep of the other. The camel is nrged on by the rider's heel, or a switch. The camels generally march in a long string, one behind the other, with deliberate bnt long steps, always snatching at herbs by the wayside when they have an opportunity. Their trotting and galloping paces are unpleasant. A camel can also carry two or more persons in a litter, and may also be made to carry the traveller's luggage. Mounting is not easy at first. When the animal kneels down, the rider grasps the two crutches, and places one knee on the cushion; he then swings the other leg into the saddle over the hindmost crutch. The camels have a trick of getting $n p$ while the rider is in the act of mounting, but the drivers prevent this by putting their feet on one of the animal's bent fore-legs. The first movements are always somewhat violent, and the novice must hold fast by the crutches; as the camel always gets up with its hindlegs first, the rider should at first lean back, and afterwards forward. The walking motion is very pleasant, and those who are accustomed to it prefer a camel to a horse for a long journey. The rider can read comfortably if he wishes, and need not hold the reins in his hand.

Ababian Saddle-bags (Khurg) should be purchased for the jonrney, as they are very convenient for carrying the requirements of the toilet, books, tobacco, and other articles.

With regard to Dress, see p. xv. Overcoats, cloaks, or bonrnonses ('abâyeh'; see p. xl), and slippers, should not be forgotten. The traveller shonld also bc provided with Strong Shoes, if he intends to make
monntain ascents, as the rocks of the Serbâl and Jebel Mûsa are very sharp and angular.

A few hints with regard to Health (p. xxiii; chemists, p. 31) may also be acceptable to the traveller, althongh the climate of the peninsula is extremely healthy, especially if the traveller walk an hour or two in the mornings and evenings. A pair of smoked (not blue) spectacles, with perhaps a second pair in reserve, will be found to protect the eyes against the inflammation which is apt to be caused by the glare of the sun. A supply of zinc or other eyewash will often be useful. Castor oil (two tablespoonfuls) is a good remedy for diarrhœa, even when serious. Seidlitz powders are a specific for indigestion. Pills of quinine shonld be taken in cases of fever (which frequently attacks the Beduins), and glycerine is nseful for softening the skin when cracked by the heat. A supply of lint, sticking-plaster, and linen bandages, may also sometimes be nseful. - A cup of tea or coffee will be found refreshing at lancheon; fnel for heating water (camel-dung, and dry plants) can always be obtained by the Beduins. Good cocoa is also considered wholesome and nutritious, and is easily prepared. A supply of Liebig's extract of meat or Bovril should not be omitted.

At Cairo (or at Suez) the traveller shonld procure through his consul a letter of introduction from the Monastery of the Sinaites at Cairo to those of the Monastery of St. Catbarine, where he will then receive every attention.

Routes. The following are the principal routes (distances see p. 234):
(a) Land Route. This route leads by Wâdi Maghâra (p. 248), Wâdi Mokatteb (p. 250), Wâdi Firân (p. 251), and Nakb el-Ḥ̂wi (p. 258), to the Monastery of Sinai, and returns by Wâdi esh-Shêkh (p. 275), Şarbût elKhâdem (p. 277), and Wâdi el-Homr (p. 279) near the sea, and to the road leading to Snez. In this way the traveller does not retrace his steps, except on a portion of the route.
(b) Sea Voyage. A boat conveys the traveller down the Red Sea to Tûr ( $\mathbf{p}$. 272), whence he rides to Sinai in $21 / 2$ days. When the $N$. wind, which almost always prevails on the Red Sea, is strong enongh, the voyage takes abont 20 hrs.; but it may take much longer if the breeze subsides. As the vessel skirts the coast, and as violent storms in the Red Sea are very rare, except during the prevalence of the Khamsin in April and May, the voyage in a boat of sufficient size (abont 20 tons' burden) is nnattended with danger, though far from pleasant in a bad vessel. The return-jonrney should not be made by water, except by the steamer which touches at Tûr dnring the period of the pilgrim-quarantine. In a sailing-boat, owing to the prevalence of the $N$. wind, constant tacking is necessary, so that the voyage takes 8-10 days or more. - The pleasantest and most interesting plan, for those who do not object too much to the sea-voyage and the trouble of obtaining camels at Tûr, is to go by route $b$ and return by route a.

To the above directions may, lastly, be added a few hints for the benefit of travellers who have to stndy economy of time and money. Take the railway from Cairo to Suez. Dispense with tents and beds; but take at least a couple of warm rngs to fold over the saddle, and to be nsed at night. A hammock will also be found very serviceable, and the camp may be pitched where the trees are large enough to give it support. Before leaving Cairo the traveller should lay in a stock of preserved meats and wine, and buy a lamp and a few cooking ntensils. Pack these in palm-leaf baskets, which are well adapted for the camels. If necessary the stock of provisions may be reinforced at Tûr by fresh bread, a few fowls, lobsters, and fish, and some date paste. Proceed from Suez to Tûr by boat or by steamer (during the quarantine period). Hire a camel at Tûr with a Bednin attendant on foot (E̛E. $11 / 2$ to Suez). Start very early and traverse the desert to wâdi es-Slêh (see p. 273), reaching the Sinai Monastery next evening. Thence travel slowly to Wâdi Bacbar. Lastly, return to Suez by forced marches, taking about two days and a night. The whole journey may thus be accomplished in eight days, without reckoning the stay at the monastery, and perhaps at Fîran; and as a
sheltered resting-place may always be found among the monntains, the protection of a tent will never be missed, excepting perhaps on the last day of the expedition.

Distances. As a standard of distance we adopt the time osually occupied by the camels in performing the journey. Their average rate of travelling is about $21 / 2$ M. per hour.

When a journey in the East is to last for several days, it will be found impossible to indnce the boatmen on the Nile, or the 'Children of the Desert', to start early in the morning, as they invariably seem to think that a late hour in the afternoon is the most suitable time, so that a very short distance only is performed on the first day. So on the tour to Sinai the party seldom gets farther than 'Ain Mûsa (p. 198) on the first day, but on the second and following days more satisfactory progress is made. Patience is therefore indispensable at starting. The journey is usually made without any prolonged halt, except at the mines of Wâdi Maghâra in the Wâdi Mokatteb, in which we spend 3-4 hrs., riding at a slower pace; at the Jebel Serbâl, if it is to be ascended, for one day; and at Şarbû́t el-Khâdem, for ${ }^{1 / 2-1}$ day. Mount Sinai, being the great object of the journey, requires a stay of $2-3$ days.

At the $N$. end of the Red Sea two long, narrow bays extend into the mainland, the Gulf of Suez on the W., and the Bay of Akaba on the East. The peninsula thus formed, which belongs to Arabia, is called the Peninsula of Sinai, or Arabia Petraea, after Petra, its capital. It consists entirely of sterile ranges of mountains, furrowed by Wâdis, or valleys with water-courses, which are scantily filled after rain only. The geological formations of the peninsula are extremely interesting. The S. promontory of the peninsula is called Râs, or Cape Mohammed. This large, triangular region is 9400 sq . M. in area, i.e. about the same size as Sicily. It is appropriately called the Peninsula of Sinai, because 'Mount Sinai constitutes the nucleus of its formation, and presents physical features entirely distinct from those of the surrounding regions. Isolated by the sea and desert from the rest of the earth and its history, it has yet, from a very remote period, formed the highly revered vestibule of all the temples of the civilized world' (C. Ritter). The Mount Sinai group, with its masses of granite, forms the S.W. half of the peninsula, while the long limestone range of Jebel et-Tîh, beginning at the Isthmus of Suez, first turns to the S.E., and then sends forth a number of ramifications to the E. and N.F. The Sinai group forms a watershed from which wàdis descend to the E. and W., i.e. to the gulfs of Suez and 'Akaba respectively; while the 'River of Egypt', which is mentioned as the boundary of Palestine in the Bible, and is now the Wâdi el-cArîsh, descends from the Jebel et-Tîh towards the N. to the Mediterranean. Those parts of the Tih Mountains across which our route lies rise to a moderate height, and are formed of limestone, chalk, and, to a smaller extent, of sandstone.

The Mount Sinai Group. 'This huge range, composed of primæval gneiss and granite, or, in more precise geological terminology, of colourless quartz, flesh-colon red felspar, green hornblende, and black slate, rising in majestic and precipitons masses and furrowed by vertical clefts, extends from Serbâl to the Om Shômar, and from the Om Shômar to the Râs Mohammed. Since the time of their formation these crystalline masses have
undergone no geological change, but have reared their summits above the ocean from the beginning of time, unaffected by the transitions of the Silurian or Devonian, the Triassic or chalk periods. At the base only do these venerable mountains show any trace of alteration. Thus the Red Sea has on one side thrown a girdle of coral around Mount Sinai, and so in recent times produced a coast district; while towards the N. the sea, dnring the chalk period, has formed the limestone platean of the desert of Tih ( 4000 ft . above the sea-level), which stretches across the whole of Sinai to Mount Lebanon. The crystalline masses of the Sinai chain, which extend from N . to S . for a distance of about 40 M ., exhibit no great variety. The whole range forms a central nucleus traversed by diorites and porphyries' (O. Fraas).

Inhabitants. Amid the sterile mountains and valleys of the peninsula, some $4-5000$ Beduins manage to obtain a livelihood. They generally have remarkably slight figures, and regular, sharply marked features. The boys, who follow the camels and wait upon travellers, are particularly graceful and engaging; the men are employed in conveying millstones, charcoal, and other wares to Egypt; they supply travellers (who are chiefly pilgrims of the Greek faith) with camels, hant the mountain goat, celebrate festivals, and, in the W. part of the peninsula at least, rarely indulge in the sanguinary feuds which the differentribes formerly waged with one another. Those occupying the E. and the N.E. of Arabia Petræa are of a wilder and more warlike character; the boys and girls, and occasionally the men, drive the goats and the speckled sheep, which call to mind the artifice resorted to by Jacob, to the meagre pastnres in summer, while the women remain in the tents to look after their children and household work. In the best watered parts of the peninsula, the Beduins have built themselves huts, and cultivate plantations of dates, the most productive of which are in the Wâdi Fîrân ( $p$. 251), and in the neighbourhood of Tûr on the Red Sea. In all other districts the inhabitants live in tents. The Tâwara are good-natured, honest, and generally of noble bearing; they are quite free from the sordid cupidity of the lower classes in Egypt, and the name of 'Fellâh' is used by them as a term of reproach. They do not practise polygamy, and their families are generally small. The young Beduins have opportnnities of seeing the girls of their tribe unveiled, while tending their herds on the mountains, and of forming attachments to them. Marriages from inclination are therefore frequent here, bnt custom requires that the bridegroom should purchase his bride from her father, the nsual price being several camels, and a certain sum of money, but the bargain is seldom concladed without protracted negotiations condncted by a third party. The girl is not permitted to know anything of these negotiations between the father, the suitor, and the match-maker (khâtîib); and if she should happen to have been a witness of them, decorum requires that she should retire into the mountains, though only for a few hours. Some tribes require that she should remain among the mountains for the three days preceding the marriage, but among the Têwara she spends them in a tent erected beside that of her father, whence she is removed to the dwelling of her future husband. It occasionally happens that the girl flees of her own accord to the mountains, and seriously resists and throws stones at an nnacceptable suitor (comp. p. 254 ). Each tribe has a Shêkh, or chief, a title of honour which is also sometimes applied to the older and most respected members of the commnnity. The dress of these Bednins is very simple. They wear a țarbûsh or a turban, and a grey gown fastened with a girdle round the waist. In cold weather they wear a bnrnous of coarse material; many of them are bare-footed, but the wealthier wear sandals of camel-leather. Their nsual weapons consist of sabres and knives; the guns they use for hunting are of great length and simple construction. They neither use horses nor lances, but the men often carry staves, which are still made in the form of the Egyptian $\underset{\sim}{\infty}$. From their girdles usually hang amulets, tinder, and tobacco pipes. Those tribes, with whom the traveller chiefly comes in contact, call
themselves TTâwara (people of Tîr), and are generally honest. The principal sub-divisions of this tribe are the Sibjân ed-dêr, Mezêneh, Garârisheh, Ṣawâliha, Sa'îdîyeh, Awârimeh, 'Ảlêkât, Râdanîyeh, and Shahîn. The Beduins of the E. and N.E., and particularly the 'Alawîn, are wild, warlike, and insolent. The Tîyâheh, who conduct the traveller from Nakhleh to Hebron, are less objectionable. With regard to the servants of the monastery (Jebelîyeh), and the families dependent on them, who are settled in the oasis of Fîrân and in Tûr, see p. 259 . Each tribe has its particular district, the bonndaries of which are indicated by stones at doubtful points. These Beduins have long professed El-Islâm, bnt know little or nothing of the Prophet and his religion. They are seldom seen to pray, bnt they celebrate festivals to Şalih and Mûsa (Moses), their national saints, and sacrifice victims in their honour (see pp. 257, 276).

History of the Peninsula. The history of this region is as old as that of Egypt itself, for we find that the first Pharaoh, of whose reign we possess contemporaneous monuments bearing inscriptions (Snefra), signalised himself as the conqueror of these mountain tribes, and the discoverer of the mines. The mines in the desolate Wâdi Maghâra (p. 248) and Ṣarbût el-Khâdem (p. 277) were worked by Egyptians more than 5000 years ago; and copper, malachite, and turquoises were brought thence to the treasury of Memphis. Down to the time of the invasion of Egypt by the Hyksos ( $p$. cvii), we learn that the peninsula was dependent on the Pharaohs, and was impoverished for their advantage. Whilst the latter, having been supplanted by the new masters of Egypt, maintained themselves in the S. part of the valley of the Nile, it seems that the working of the mines was snspended, and that the monntain tribes sncceeded in shaking off the yoke of their oppressors. Immediately after the expulsion of the Hyksos, these tribes were subjugated anew by the powerful monarchs of the 18th Dynasty, who conqnered all the states adjoining Egypt on the East. This is proved by the inscriptions of Şarbût el-Khâdem, extending down to the 201h Dynasty. The names of the springs, monntains, and valleys resemble those of the Book of Exodus; and the Biblical traditions, which the Beduins attach to them, doubtless owe their origin to the Christians who settled at an early period in this wilderness. With regard to the battle with the Amalekites, and Mount Sinai as the scene of the promulgation of the law, see pp. 237 et seq. We may, however, remark here, that the Israelites of a later period never made pilgrimages from Palestine to the sacred mount, and that, throughout the Mnsaic writings, Elijah (p. 267) alone is mentioned as a visitor to Monnt Sinai. Down to the time of the first settlement of the early Christians, we rarely have any mention of travellers in the peninsula; but they are mentioned on some Egyptian inscriptions, on the occasion of the jonrneys to Ophir ( 1 Kings ix. 26, 28), and lastly in a few notices of the history of the Nabatæans, a people from the N.E., who took possession of the commercial ronte abandoned by the Phœnicians, and, from the famous rocky city of Petra, commanded the peninsula down to abont the period of the birth of Christ. Numerous rocks in the districts we are about to visit bear inscriptions (p. 25.) which owe their origin to the heathen Nabatæans. Down to the begiuning of the Christian era, the population probably led a similar life to $14 . t$ of the present day. Shepherds pastnred their flocks here, and merchants and pilgrims traversed the wâdis on camels, or ascended to th : summit of the sacred Mount Serbâl. The caravans of the merchants, however, were more richly freighted than at the present day, while the natives, instead of praying to Allah and the Prophet, worshipped the brilliant stars in the cloudlese sky of this almost rainless conntry.

On the diffusion of Christianity, the deserts of the peninsula were peopled by a now race, and assnited a new appearance and a more important position. Arabia Petræa lay between the two lands which had embraced Christianity most ardently, namely Syria and Egypt, and soon became an asylum for the believers of these two countries who longed for pardon and redemption, and who hoped, by subjecting themselves
to misery and privations in this world, to attain salvation in the next. Their great exemplars were Moses and Elijah, both of whom had trodden the sacred soil of the peninsula, and this region therefore appeared to them a most appropriate place of retirement from the bnsiness and pleasures of a wicked world. The first seeds of Christianity, which bore fruit in Trajan's reign, were perhaps sown here by St. Paul about A.D. 40. In A.D. 105 the peninsnla was annexed to the Roman empire by Cornelius Palma, prefect of Syria. After the middle of the 4th cent. the peninsula was gradually peopled with Anchorites and numerous Cœnobites, who were bound by a common monastic rule. Tradition ascribes the fonndation of the brotherhoods of hermits and monks to St. Panl of Thebes and St. Anthony of Koma, but the most recent investigations (comp. p. 167) prove this conjecture to be improbable. On Mt. Serbâl and in the Wâdi Fîrân, the ancient Pharan, was situated the most thickly inhabited settlement (laura) of anchorites known to have existed in any of the localities frequented by the early Christians. The penitents were not only exposed to privations of every kind, but to the attacks of the cruel and rapacious Saracens and Blemmyes. About the year 305 forty of the monks of Sinai were massacred by the Saracens. In 361-63 St. Julian founded a church on Sinai (Mt. Serbâl ?). Terrible massacres of the monks of Sinai were again perpetrated by the Saracens in 373 and 395 or 411, of which Ammonius and Nilus, two eye-witnesses, have given accounts. In the 5th cent. many of the monks and anchorites embraced heretical doctrines, which exposed them to severe persecntions. In the reign of Justinian, according to the account of Procopins, a church, dedicated to the Virgin, was built halfway up Monnt Sinai (on the site of the present chapel of Elijah), while a very strong fortress was constructed at the foot of the hill, and provided with a garrison, to prevent the Saracens of the peninsula from invading Palestine (see p. 256).

In the 7th cent. the armies of the khalîfs began their victorious career. They did not penetrate into the interior of the peninsula, but doubtless took possession of Aila ('Akaba), which was chiefly inhabited by Jews. In the course of subseqnent expeditions, the peninsula of Sinai was found to be almost exclusively occupied by a Christian population. The wandering tribes of the natives readily embraced the new religion, and the monasteries and cells of the anchorites were ere long deserted. The monks of the Monastery of the Transfiguration alone continued to maintain their position in spite of many difficulties, partly by their resolute conduct, and partly by stratagem (p. 261). In the time of the Crusades, Aila ( p . 280) became one of the chief scenes of the battles between Saladin, who captured it in 1170, and the Franks, who were afterwards unable to maintain possession of it, notwithstanding the efforts made by Count Rainold. After the Crusades the history of the peninsula was merged in that of Egypt. Its sequestered valleys were traversed by hosts of Mecca pilgrims, while there was also, as at the present day, no lack of Christian pilgrims of the Greek faith, wending their way to the monastery of Sinai.

The Exodus. Until recently the Bible was the only source of information regarding the emigration of the Jews from Egypt, but the monuments and papyrns-scrolls which have been handed down to us by the ancient Egyptians, and deciphered by modern ingenuity, now convey to us a distinct idea of the condition of Egypt at the time of the Exodus, which we may compare with the contemporaneous Biblical accounts. On collating the Bible narrative with the monuments, we find that they agree on all material points. On the other hand, however, it seems obvious, that the vicissitudes undergone by the Israelites in Egypt and during the Exodus, must have been gradnally embellished by legendary and poetical additions, before they were recorded in writing. These embellishments doubtless originated in the fertile imagination of the people, and in their profound gratitude, which prompted them to paint in the most glowing and picturesqne colours the great things which God had done for them, Most of the camping-places of the people seem, as we
shall see, to be capable of identification, since the list of stations in the wilderness, as given by Moses (Numb. xxxiii), was doubtless made from contemporaneous records $\dagger$.

The Period of the Ofpression. After Joseph's death the Israelites had multiplied greatly, and, together with other Semitic tribes, occupied the Whole of the N.E. part of the Delta, whilst the early Pharaohs of the 19th Dynasty were constantly at war with the nations whose territory adjoined the Delta on the N.E. It was therefore natural that the Egyptian kings should fear that, during their absence and that of the Egyptian army, the Jews should ally themselves with the enemies of Egypt, who were of cognate race, and this apprehension is distinctly mentioned by Pharaoh in the Bible narrative. Ramses II., after whom one of the scenes of the compulsory labour of the Israelites was named, was the Pharaoh of the oppression, and his son Merenptah (the Menephthes of Manetho) was the Pharaoh of the Exodus. The monoments inform us, that these two monarchs decorated Tanis, the ancient city of the Hyksos, anew with magnificent mouments, the place having long been shunned by their predecessors on account of the Semitic religions rites practised there. Tanis is the Zoan of the Bible, where Moses performed his miracles in the presence of Pharaoh. This place was doubtless often visited by Ramses II., who was a powerful conqueror and founder of cities, not only when on his way to battle, and on his return as a victor, but because his presence must often have been necessary for the prevention of rebellion among the numerous foreigners resident in these E. districts. The Israelitish records only mention the oppression they underwent towards the end of their sojourn in Egypt. Ramses, however, was far from being a capricious tyrant, but was a wise, though severe military prince, who employed the Semitic settlers in his kingdom in the construction of useful works, in order to prevent them from endangering his empire. The Jews, perhaps, also assisted in strengthening the double series of bastions, known as the wall of Sesostris, but constructed before the time of Ramses, which closed the Isthmus of Suez and afterwards obstructed the progress of the emigrants. The 'Egyptian wall' with its forts and frontier fortresses also afforded protection against the Asiatics, and commanded the district of Goshen.

The Pharaof of the Exodus. Ramses II. was succeeded by his thirteenth son Merenptah (p. cix), a man of mature age. At the beginning of his reign Merenptah came into serions collision with the Libyans, who had allied themselves with the warlike inhabitants of the Mediterranean islands, and had attacked the coast of Egypt. He succeeded, however,

[^41]in subduing them, and was thas enabled to march victoriously to Thebes, where he caused spacious buildings to be erected, and encouraged the scientific abours of the priests. Like his father, he also occasionally resided at Tanis, as the monuments inform us, and seems to have accorded greater liberty to the Semitic inhabitants of the Delta than his predecessor. Being, however, less powerful and resolute, he was more exposed to danger from his Asiatic neighbours than Ramses, who had not only rendered them tributary, but had leagued himself with them by intermarriages and treaties of peace, of which valuable records are still preserved. Moreover, before his accession to the throne the fortification of the E. frontier of the empire had been completed. He continued, nevertheless, to employ the bondsmen in Goshen, and to keep them in check, as they might have become very formidable if they had succeeded in uniting their forces against Egypt. Accordingly, when Moses requested Pharaoh to allow him to lead his people into the desert, Merenptah's policy was to refuse, his great object being to prevent the union of the Israelites with other cognate tribes. This accounts for his obstinate resistance to the apparently simple request of Moses. The story of the plagues, and the destroying angel is well known. The historical foundation of the embellished narrative is corroborated by Egyptian and Greek records, which state that Merenptah was compelled by varions disastrous occurreuces to allow the foreigners (or 'lepers', as they are called in Egyptian reports) to quit the country.

The Exodus. Moses and his people doubtless started from Ramses; but it is difficult to follow the roate taken by the emigrants during the first few days. Notwithstanding the ingenions theory of Bragsch (see Note, p. 238), there seems little doubt that it was the Red Sea which the Israelites crossed, when we consider that their route to the $E$. was obstructed by a line of fortifications. Believing this, we at once succeed in identifying the stations at which they halted, and in accounting for the apparently eccentric route chosen by Moses. The following passage occurs in Numbers xxxiii. 5, et seq.: - 'And the children of Israel removed from Rameses, and pitched in Succoth; and they departed from Succoth and pitched in Etham, which is in the edge of the wilderness. And they removed from Etham, and turned again unto Pi-Hahiroth, which is before Baal Zephon; and they pitched before Migdol. And they departed from before Pi-Hahiroth, and passed throngh the midst of the sea into the wilderness'. - Ramses (Maskhûta), on the freshwater canal between Tell el-Kebîr and the Lake of Timsậh, was their

Now the monuments mention a Khetam called Khetam in the Province of Zor (i.e. Tanis-Ramses, p. 228), to distinguish it from other fortresses of the same name. A representation of this Khetam is preserved on a monument of Seti I. in Karnak, in the form of a fortress on both banks of the river (the Pelusiac arm of the Nile), the opposite parts being connected by a bridge (Kantara), while a town, uamed Tabenet, lies in the vicinity. [This Tabenet is probably to be identified with the 'Pelusian Daphnae' (the plural form being applied to the double fortress), of which Herodotus (ii. 30) expressly says, that it was occupied in his time, and before it, by an Egyptian garrison for the protection of the frontier towards Arabia and Syria.] This Khetam, together with the town of Tabenet, is probably to be sought for in the ruins of Tell Defenneh (see p. 212 and Map of the Canal of Suez, W. of Kantara, p. 211). The memory of the bridge (kantara) connecting the double fortress still survives in Kantara (see p. 212), which lies a little to the E. of Tell Defenneh. The accuracy of this theory, according to Brugsch, is also proved by the Egyptian and classical acconnts of the roads which led to the E. from Ramses (i.e. Tanîs-Sîn). Two such roads are said to have existed; one of these led to the N.E. by Pithom (p. 194) through the marshy district of Succoth, with its numerous canals, and, according to the Egyptian texts and the authority of Pliny, was unsuitable for caravans and therefore but little frequented; the second was nsed by the Pharaohs when they marched towards the E. with their chariots and horsemen, and led from Ramses to Segol in Succoth, Khetam, and Migdol. In the British
rallying point; the Israelites assembled here from On (Heliopolis), Belbès, Bubastis, and Pithom, from the E. and S.E., and joined those coming from Tanis and the N. pastoral districts. The various detachments were here united; their hearts were filled with joyous hopes of reaching the happy, promised land, and, with their swords ready to resist opposition, if necessary, the Israelites thus departed from Egypt 'armed', and with a 'high hand'. On leaving Ramses they took the road to Syria, and encamped at Succoth, to the S. of the modern Lake Balah. On the following day they passed Etham (or Khetam, 'the entrenchment'), i.e. the line of fortifications above mentioned. Here their march was arrested by towers, moats, and troops of well-armed soldiers. Herenpon the people, who while under the yoke of their oppressors had little opportunity of learning to use their swords, lost courage and desired to return. Moses knew the character of the multitude under his care, and was aware that they were as yet unable to resist disciplined forces, and to defy death for the sake of gaining their liberty, and now 'God led them not', we are informed by Exodus xiii. 17, 'through the way of the land of the Philistines, although that was near; for God said, lest peradventure the people repent when they see war, and they return to Egypt: But God led the people about (before Etham) through the way of the wilderness of the Red Sea'. Moses, accordingly, made them leave the route to Syria, and turn towards the $S$. in the neighbourhood of the fortifications, probably near the modern Bîr Makhdal, anciently called Migdol, which, like the Egyptian Khetam (Etham), signifies a castle and the tower of a fortress. During his long sojonrn in the wilderness, after he had slain the Egyptian, their great leader had become familiar with all the routes in this region, and as soon as he observed the weakness of his people, almost the only conrse open to him was to avoid the forts, and turn towards the S., in order to lead them round the N. end of the modern Gulf of Suez, and through the wilderness of Arabia Petræa to Canaan. From the outset he appears to have had a twofold object in view; the first being to emancipate the people from the Egyptian yoke with the least possible loss, and the second to discipline them, and accustom them to order, obedience, and nobler pursuits in life, in a locality suited for his purpose. At Etham ('the bastions') the wanderers accordingly changed the direction of their route, and turned to the $S$. between the $W$. bank of the bitter lakes and the E. slope of the Gebel Ahmed Taher, and, after a long and fatigning march, encamped at Pi-Hahiroth, the name of

Museum is preserved a papyrus letter upwards of 3000 years old, in which an Egyptian writer describes his departure from the royal palace at Ramses, observing that his object was to follow two fugitive servants. The writer mentions that he started from Ramses on the 9th day of the third summer montb, that he arrived on the 10th at Segol in Succoth, and on the 12th at Khetam, and that he there learned, that the fugitives had taken the route in the direction of the wall (i.e. Anbu-Gerrha-Shûr, see p. 205), to the N. of Migdol. If Moses and the Israelites are substituted for the two fugitive servants, and the pursuing Pharaoh for the Writer, the ronte is precisely the same as that followed by the Hebrews on their Exodus. As the writer arrived on the first day at Segol, and on the third arrived at Etham, and as the fugitives took the route thence to Migdol and Anbu-Gerrha-Shûr, so also did the lsraelites. On their arrival there the Israelites were then on the bank of the Sirbonic Lake (see p. 205. and the Map), a long sheet of water to the S E. of Port Sa'îd. This lake was well known to the ancients, but has long since been filled with sand, and has therefore fallen into oblivion. According to ancient accounts the lake was in the form of a long strip, separated from the Mediterranean by a narrow barrier only, and extending along the coast. Diodorus informs us that the lake was entirely overgrown with reeds and papyrus plants, and that it was very dangerous to travellers, particularly when a violent $S$. wind drove the sand of the desert over its surface so as entirely to conceal the water, as the surface might then easily be taken for land, and thus lure the ignorant to their de-
which has been identified with the modern © Agr'ad ('pi' being the Egyptian for place). They then camped for the last time in Egypt near the Red Sea, between Migdol, a frontier fort, near the ancient Kâmbysu, where a Roman military hospital afterwards stood (about 9 M. to the N. of the head of the bay and the scanty remains of the ancient Arsinoë), and the 'Atâka mountains. This range was anciently called Ba'al Zephon, and on its commanding summit the Phœnician sailors used to offer sacrifices to Baral Zephon, or the N. wind, which wafted their ships towards the South. - When Pharaoh heard that the people had not crossed the line of fortifications, and had quitted the route to Syria, on which lay the famous temple of the desert on Monnt Casius, where Moses had intended sacrificing to his God, it was natural for him to say - 'they are entangled in the land, the wilderness hath shut them in' (Exodus xiv. 3). His mistrust was next aroused. - 'And it was told the king of Egypt that the people fled: and the heart of Pharaoh and of his servants was tnrned against the people, and they said: why have we done this, that we have let Israel go from serving us?' (Exodus xiv. 5). The parsuit now began; 'he made ready his chariot, and took his people with him: and he took 600 chosen chariots, and all the chariots of Egypt, and captains over every one of them. And the Lord hardened the heart of Pharaoh, king of Egypt, and he pursued after the children of Israel'. Whilst the Israelites were encamped at Pi-Hahiroth the disciplined army approached; they departed hastily, and succeeded in crossing the head of the gulf at low tide, as was frequently done by the caravans before the construction of the canal. The Egyptians, in hot pursuit, reached the ford before the tide had begun to set in; bat a violent gale from the S.W, sprang up, the waters rose suddenly and 'covered the chariots, and the horsemen, and all the host of Pharaoh that came into the sea after them; there remained not so much as one of them'.

## 1. From Suez to Mount Sinai by Maghára and Wâdi Fírån.

8 Dars. - 1st Day. From Suez to 'Ain Mûsa (p. 198), 21/2 hrs. A longer journey cannot well be accomplished on the first day, but the camels and attendants may be sent on thither, while the traveller may follow alone in the evening or early on the following morning, by boat, and there mount his camel for the first time. - 2nd Day. From 'Ain

[^42]Baedeker's Egypt I. 3rd Ed.

Mûsa to the beginning of the Wdai Werdañ(see below), 8 hrs .: from 'Ain Mûsa to the beginning of the great plain 3 hrs .; thence to the heginning of the Wâdi Werdân 5 hrs . - Brd Day. From the beginning of the Wâdi Werdân to Wâdi' Gharandel (p. 244), $73 / 4 \mathrm{hrs}$.: to Wâdi 'Amâra; $33 / 4 \mathrm{hrs}$; thence to Wâdi Hawâra (p. 243), 2hrs.; and thence to Wâdi Gharandel, 2 hrs. - 4th Day. From Wâdi Gharandel to Rảs Aba Zenîmeh (p. 246), $83 / 4 \mathrm{hrs}$. : to Wâdi el-Homr (p. 246), $51 / 2$ hrs.; thence to Râs Ahû Zenîmeh, $31 / 4 \mathrm{hrs}$. The 4 th day may he divided into two days, if the Jebel Hammâm Far ${ }^{\text {unn }}$ ( $p .245$ ) is to he visited. The best camping-place is at the mouth of the Wâdi Kuwêseh. - 5th Day. From Râs Abû Zenimeh to the mines in the Wadi Maghara (p. 248), $81 / 4$ hrs.: to Hanak el-Lakam (p. 247), $33 / 4 \mathrm{hrs}$; thence to the mines in the Wâdi Maghàra (p. 248), $41 / 2 \mathrm{hrs}$. - 6th Day. From Wâdi Maghâra to the hill of El-Mehavret in the Wadi Fîran (p. 252), 9 hrs. : to the Wâdi Firân, $31 / 4$ hrs.; through the Wâdi Firân to El-Meharret, $53 / 4 \mathrm{hrs}$. The 6th day's journey should he divided into two parts hy those who are specially interested in the mines of Wâdi Maghâra and the inscriptions in the Wâdi Mokatteh. On the 7th day we then arrive in good time at the foot of Mt. Serbâl, or at the Oasis of Fîran (p. 252). - 7th Day. From the hill of El-Meharret to the end of the Wadi Selaf (p. 258), $73 / 4 \mathrm{hrs}$.: to the heginning of the Wâdi Selâf, 2 hrs ; thence to the end of the valley, $5^{3 / 4}$ hrs. The traveller who desires to ascend Mt. Serbâl (p. 254), should devote this day to the excursion, giving notice to the Beduins of this intention on the previous day. They will then provide gnides, and pitch the tents near the hest starting-point for the ascent, which should be hegun at an early hour. - 8th Day. Over the Nakh el-Hâwi (p. 258) to the Monastery of Sinai, $41 / 2 \mathrm{hrs}$. If the easier route from the oasis of Firrân through the Wâdi esh-Shêkh (p. 257) to the monastery ( $123 / 4 \mathrm{hrs}$.) is preferred, the party should encamp on the 7th day hy the defile of ElWatîyeh (9 hrs.; p. 276).

From Suez to ( $21 / 2 \mathrm{hrs}$.) 'Ain Mûsa, see p. 198.
Beyond 'Ain Mûsa the route traverses the Wâdi el-‘Irân, and afterwards an undulating region. On the hill-sides specimens of isinglass-stone are frequently found. To the right stretches the sea, beyond which rise the spurs of the 'Atâka mountains (p. 196); on the left are the heights of the Jebel er-Râha, and, farther on, those of the Tîh Chain (p. 279). About 9 M. from 'Ain Mûsa begins a monotonous tract, which extends for a distance of 20 M . in the direction of the Wâdi el-'Amâra. The whole distance to the Wâdi Gharandel (p. 244), which takes two days, is destitute of variety, and is particularly fatiguing on the return-route, even in fine weather. If, moreover, the Khamsîn ( $p$. lxviii) begins to blow and to raise dense clouds of dust, the patience of the traveller is severely tried, and the journey seems interminable. Near the beginning of the plain, the so-called Derb Far'un (or 'road of the Pharaohs'), skirting the coast, diverges to the right to the Jebel Hammâm Far'ûn (p. 245), while another route to the left leads to the Jebel er-Râha and the desert of Et-Tîh. We follow the camel track which runs between these two.

We next cross ( 2 hrs ) several wâdis, the most important of which is the broad Wâdi Sudur, adjoined by the Jebel Bishr or $\boldsymbol{S} \mathbf{S}^{-}$ dûr on the left, and separating the hills of Er-Râha and Et-Tîh. After a journey of fully 5 hrs . from the beginning of the plain we reach the Wádi Werdán. The surface of the desert is sprinkled at places with sharp flints, which are perhaps fragments of nodules
burst by the heat, and resemble arrow-heads, knives, and other implements.

We traverse the Wâdi Werdân in $11 / 4$ hour. Yellow hills of sand rise on the right, and the sea and the African coast continue visible for some time. On the left the Wuta Hills, which belong to the Tîh chain, approach the route, and we obtain a fine retrospect of the Jebel Şudûr (p. 242). The sea disappears, but is afterwards again visible. The hills assume more picturesque forms. The light-coloured limestone hills, and the whitish yellow surface of the desert, present a remarkably colourless appearance, but the soil is not entirely destitute of vegetation, especially in spring. One of the commonest plants is the Betharân (Cantolina fragrantissima), of which the camels are very fond, and which is full of aromatic juice; it is collected by the natives in the N. part of the peninsula. Golden colocynths (Handal; Citrullus colocynthis) are sometimes seen lying on the wayside, having fallen from their dark green stems. The dried shells are sometimes used by the Beduins for holding water, or as a receptacle for butter. The inside of the fruit is sometimes used as a medicine. The Seyâl (Acacia tortilis) occurs frequently farther S.; the juice which it exudes (Gum Arabic) is collected by the Beduins for sale. Chewing the gum is said to be a good remedy for thirst.

The ( $21 / 2 \mathrm{hrs}$.) Wádi el-Amâra, and beyond it the Hajer erRelchâb ('rider's stone'), consisting of several masses of rock, are next reached. The ground becomes more undulating. In the distance, to the S., rise the Jebel Hammâm Far'ûn (p. 245) and the long Jebel Gharandel (p. 244). In less than 2 hrs. we next reach the sand-hills in the Wadi Hawara, on the summit of which a bitter spring rises. Around it grow a number of stunted palm-bushes and a few thorns. This is believed to be the Marah of the Bible, mentioned by Moses (Exodus, xv. 23-25; comp. p. 210). $\dagger$ Burckhardt conjectures that the juice of the berry of the gharkad (Nitrasia tridentata Desf.), a shrub growing in the neighbouring Wâdi Gharandel, may have the property, like the juice of the pomegranate, of improving brackish water; but the Arabs know of no plant possessing the virtue of that thrown into the spring by Moses.

Stations of the Israelites in the Wilderness, and number of the Emigrants. The Biblical record of these stations continues as follows (Numb. xxxiii. 8): - 'And they departed from before Pi-Hahiroth, and passed through the midst of the sea into the wilderness, and went three days' journey in the wilderness of Etham, and pitched in Marah. 9. And they removed from Marah, and came unto Elim: and in Elim were twelve fountains of water, and threescore and ten palm trees; and they pitched there.' The desert of Etham (which adjoined the bastions of

[^43]Khetam) may now be traversed more quickly by a Sinai pilgrim with little luggage; but it could hardly have been crossed by a whole nation in less than three days. Marah is thus the bitter spring in the Wadi Hawara, and Elim, with its twelve springs and seventy palms, has long been sought for in the Wadi Gharandel, although, as we shall see, the distance from Hawâra to Gharandel (2 hrs.) is a very short journey, even for so large a number.

Standing on the margin of the spring of Hawâra, the thoughtful traveller will naturally ask, how 600,000 men with their families, that is, at least two million persons, could possibly have drunk of its waters. $\dagger$ Even if we assume that the volume of water was more copious in the time of the Exodus, owing to the more luxuriant vegetation, many other circumstances would still combine to render it improbable that two million persons could have partaken of it. The probability is that these high figures are a mythical embellishment of the historical facts. Schleiden has pointed out, that if the Israelites had numbered two million as the Bible records, they would have formed a sufficiently dense population for the whole peninsula. For such a gigantic caravan a million gallons of water a day would hardly have sufficed, without allowing for the cattle, and at the present day the Beduins begin to feel anxious, when a party of a few hundreds encamps around their springs. The number 600,000 has probably originated from the poetical accounts of the miraculous preservation of the people, who gratefully ascribed so great miracles to their protecting God, in order the more effectually to extol his power. These numbers should, doubtless, be very greatly reduced, and so also should the forty years, which the Israelites are said to have spent in the wilderness. It was obviously the purpose of their leaders to inure the people to the privations of the desert, in order to prepare them for the battles they were about to fight in Palestine, but the sacred number forty, which is so often repeated, and which was used to signify a generation, most probably indicates a term of years; we may also observe that Moses was forty years old when he fled, eighty when he led the people into the wilderness, and one hundred and twenty when he died. The fact that the Arabian literature contains a number of writings called 'Arbainat', or tales in which the number forty plays a conspicuous part, affords a confirmation of the above view.

Immediately before us rises the curiously shaped Jebel Gharandel (Gerendel, Kharandel, Gurundel), the name of which occurs at an early period. Its slopes have been compared to 'petrified cushions'. It is possible that the wâdi which descends to the Gulf of Suez gave its name of Charandra, used during the Roman period, to the N. part of the Arabian gulf, where Ptolemy II. founded the town of Arsinoë. In the Itinerary of Antonine the place is called Gurandela.

The Wadi Gharandel (reached in 2 hrs . from the spring in the Wâdi Hawàra), which runs for a long distance to the N.E., affords, particularly at the spot crossed by the Sinai route, a moderate supply of slightly brackish, but drinkable, water, especially after heavy rain, in consequence of which the desert here is clothed with pleasing, though not luxuriant, vegetation. Among the plants are several lofty and bushy palms, seyâl trees (p. 243), gharkad shrubs, and tamarisks. Small groups of rocks on the margin of the oasis enhance the comparative picturesqueness of the

[^44]valley, which was perhaps once better watered and more richly clothed with vegetation. Thus B. von Breidenbach (15th cent.), one of the first travellers who identified Gharandel with Elim, observed here a shrub bearing nuts, about the size of hazel-nuts, and known as Pharaoh nuts, but which is now extinct. If this is the Elim of the Bible, the 12 springs and 70 palm-trees are greatly reduced in number. The remains of two hermit-cells, hewn in the rocks, are not worth visiting. The Wâdi Gharandel, owing to its supply of water, is a favourite camping-place for the night.

The route, farther on, at first ascends slowly. In 1 hr . we reach the sepulchral mound of Hoṣân Aba Zenneh (horse of Abû Zenneh), on which the Beduins, in passing, throw a stone or a handful of sand, as a mark of contempt, exclaiming - 'here is food for the horse of Abû Zenneh.' The story goes, that an Arab called Abû Zenneh cruelly over-rode his mare, and, when she broke down, spurred her so violently, that she gave a final, long bound, and then dropped down dead. The hard-hearted rider marked the marvellous length of the last leap of his horse with stones, and every passer-by now adds to the heap in token of disapproval.

A little farther on we obtain a fine view : facing us rises the three-peaked Şarbût el-Jemel (p. 279), to the S.E. tower the summits of the Jebel Serbâl and the Jebel el-Benât, to the left are the heights of Et-Tîh, and to the right the Jebel Hammâm Far'ûn and Jebel Usêt. We next cross the ( $3 / 4 \mathrm{hr}$.) Wâdi Usêt, which contains several pools of water and palm saplings, and which has erroneously been identified with the Elim of the Bible (see above). The only circumstance in favour of this theory is, that the Wâdi Usêt is more distant from the Wâdi Hawâra (Marah) than the Wâdi Gharandel, which, however, lies much nearer the latter than a full day's journey.

About 2 hrs. beyond the above-mentioned hillock of stones we enter the Wâdi Kuwêseh, a spacious basin enclosed and traversed by low sand-hills, and lying at the base of the Jebel Usêṭ and Jebel Hammâm Far'ûn.

[^45]doomed to sink. - This legend is supplemented by another, which is also told by the Arabs, that, when the Jews would not believe that Pharaoh was really drowned, God ordered the sea to throw up his body. Since then bodies of drowned persons have been invariably cast up on the beach.

The hot springs are situated on the N. side of the mountain, facing the sea; they are easily found without a guide, owing to the steam which envelopes them. There is a good bathing-place at the point where they flow into the sea from the white rock, but the bather should beware of sharks. Higher up, the springs are very hot. When the temperature of the air was $90^{\circ}$, that of the water was found to be $153^{\circ}$. The water is slightly saline; according to an analysis made by J. Russegger of Vienna, it contains soda, lime, talc, chloride of hydrogen, and sulphuric acid.

The route continues to follow the Wâdi Kuwêseh for $11 / 4 \mathrm{hr}$., and then crosses the Wâdi eth-Thâl, a valley of considerable breadth, which descends to the sea towards the S.W. in the form of a narrow gorge. In about $1 / 2 \mathrm{hr}$. more we reach the Wâdi Shebêkeh. In less than 1 hr . more we reach the junction of this valley with the Wâdi el-Homr, through which (to the E .) runs the route to Sinai viâ Ṣarb̂ût el-Khâdem, described at p. 279.

We follow the valley descending towards the sea, now called the Wadi Tayyibeh, with numerous windings, some remarkable rock formations, several springs of bad water, and a few stunted palms. The route traverses a number of round hollows of considerable size, enclosed amphitheatrically by barren slopes of whitish grey sand and by rocks. The steep sides of these basins look from a distance as if they had been made artificially. The area in the centre is often so completely enclosed that no outlet is visible. Each quarter of an hour we obtain a different view, though the colouring is always the same. A striking exception to the last remark is afforded by the very curious appearance of the Jebel Tayyibeh, situated near the sea, and consisting of oblique strata of different colours; the lowest of these is of a golden yellow tint, the next is red, which is followed by a rusty black stratum, while the whole is surmounted by a yellow layer.

After $13 / 4 \mathrm{hr}$. the valley expands, and we approach the open sea, washing the banks of the sandy plain of El-Mehâir. After a walk of $11 / 2 \mathrm{hr}$. along the coast we reach the Râs Abd Zenimeh, which still bears the tomb of the saint, and affords a beautiful and sheltered camping-ground. At this spot (more probably than in the Wâdi Tayyibeh, as supposed by some authorities) was situated the encampment of the Israelites on the Red Sea (Numb. xxxiii. 10). The old harbour is still occasionally used by the fishing-boats of the Arabs. In ancient times the roads, by which ore and stone were brought from the mines of the Wâdi Maghâra and Şarbût elKhâdem for farther conveyance by water, converged here.

Beyond Ab̂̂ Zenîmeh the route at first skirts the sea for 11/2 hour. Travellers usually walk here, and amuse themselves by picking up shells, as Sinai travellers have done from time immemorial. This custom is mentioned by Thiedmarus in the 13 th cent., by Fabri, and by Breidenbach, the last of whom says, that 'various
kinds of shells are to be found on the coast of the Red Sea, and also white coral, and many beautiful stones', probably meaning by the last expression the smooth fragments of quartz on the beach. On the margin of the narrow plain of the coast, to the left of the route, rise curiously formed, yellowish, limestone hills piled up in strata, one apparently resting on gigantic, shell-shaped pedestals which have been formed by the action of the water. At the S. end of these hills rises the Jebel el-Nokhel, a bold eminence abutting so closely on the sea that it is washed by the waves at high water, in which case the traveller must cross it by a path ascending in steps.

Beyond this hill we reach a plain, called El-Markha, of considerable extent, and not destitute of vegetation. It is bounded on the N.E. by the Jebel el-Markha ( 590 ft.), a black hill, contrasting strongly with its light-coloured neighbours. Proceeding to the S.E. for $21 / 4 \mathrm{hrs}$. more, we at length reach the more mountainous part of the peninsula, which we enter by the Hanale el-Lakam, a valley varying in width, and flanked with barren rocks of reddish and grey tints. After $3 / 4 \mathrm{hr}$. we reach the mouth of the Wâdi $B a^{c} b a^{c}$ on the N., which is commanded by the dark Jebel $B a^{\prime} b a^{r}$, while on the S. (right) begins the Wâdi Shelâl. Traversing the latter for $1 / 4 \mathrm{hr}$., we next enter the Wadi Budra. The winding route ascends gradually. We pass several mountain slopes resembling huge walls of blocks of stone, artificially constructed. Farther on we observe grey and red granite rocks amidst other formations. In every direction lie long heaps of black, volcanic slag, strongly resembling the refuse from foundries. Beside them lie numerous fragments of brown, grey, and red stone, including felsite porphyry, which is remarkable for the bright, brick-red colour of the orthoclase felspar. Along the slopes rise cliffs and pinnacles of various colours and grotesque forms. The route leads from one basin into another, each of which has a horizon of its own, until ( $11 / 4 \mathrm{hr}$.) we come to a frowning barrier of rock which seems to preclude farther progress. We soon find, however, that a steep bridle-path ascends in $1 / 4 \mathrm{hr}$. to the Nakb el-Budra (or 'pass of the sword's point', 1263 ft .), by which we surmont the apparent barrier. This pass was traversed in ancient times by the beasts of burden which transported the minerals obtained in the Wâdi Maghâra to the sea; it then fell into disrepair, but was restored in 1863 by a Major Macdonald, who made an unsuccessful search for turquoises in the old mines. The summit of the pass commands a flne retrospective view of the wild Wâdi Budra, the Râs Abû Zenîmeh, the Jebel Hammâm Far'ûn, and the sea. Beyond the pass the valley is called the Wâdi Nakb el-Budra, through which we descend in $11 / 4 \mathrm{hr}$. to the Wadi Sidr, a winding valley enclosed by rocks of red granite.

We soon reach the Wâdi Umm Themân on the left, where Messrs. Palmer and Wilson (in 1869) discovered mines similar to those at Maghàra. The ( $3 / 4 \mathrm{hr}$.) Wâdi Maghâra nest diverges to
the left. At the angle formed by the latter with the Wâdi Keneh, descending from the E., are situated the famous old mines of $M a-$ ghâra, which deserve a visit (2 hrs.; or, if a thorough inspection is made, half-a-day).

The Mines of Maghara. The brown and brick-red slopes of the Wâdi Maghâra rise precipitously to a considerable height. They belong partly to the sandstone, and partly to the granite formation. The mines are situated on the slopes on the N.W. side, about 145 ft . above the bottom of the valley. The traveller has to scramble over heaps of rubble before reaching the broad but low openings of the mines, which seem once to have been protected by a gallery, now scarcely traceable. The shaft penetrates the rock to a considerable depth, being very wide at first, but afterwards contracting. Numerous pillars have been left for the support of the roof; old chisel marks are still observable. At many places the reddish stone contains small bluish-green, very impure turquoises, which may easily be detached with a penknife. These stones lose their colour entirely after a few years. On the route to the Wâdi Fîrân (p. 251) the Beduins frequently offer for sale large, but worthless, turquoises at exorbitant prices.

Small pillars with hieroglyphic inscriptions still commemorate the period when the mines were worked for the benefit of the Pharaohs. On large smooth surfaces of the rocky walls these ancient monarchs have handed down to posterity, by means of figures and writing, the fact that they conquered the Mentu, who inhabited these regions, and provided for the wants of their miners. A gigantic Pharaoh is represented grasping the necks of a number of the vanquished with one hand, while with the other heis brandishing a weapon (khopsh). Sacrifices are also represented, and festivals, and a visit paid to the mines by inspectors of high rank. The oldest king named here is Snefru ( $\mathbf{p} . \mathrm{cv}$ ), the first king of the 4 th Dynasty. The next are Khufu (Cheops, p. cv), the builder of the Great Pyramid of Gîzeh, another monarch of the 4th dynasty; Sahura, Kaka, Raenuser, Menkauhor, Tatkara (Assa), of the 5th Dynasty; Pepi-Merira and Neferkara, of the 6th Dynasty (p. cvi); Usertesen II. and Amenemha III., of the 12th Dynasty. During the domination of the Hyksos the mines were neglected; but after their expulsion, the working was resumed by Hatasu, the ellergetic sister and co-regent of Thothmes III., who has caused her ships, returning richly-laden from Arabia, to be represented at Dêr el-Bahri (Thebes). There is also a pillar here dating from the time of Ramses II., but no monument now exists of the reign of his son Merenptah, the Pharaoh of the Exodus, nor of the later kings.

The mineral obtained here is called Mafkat in the inscriptions. It was of a decided green colour, and is elsewhere represented in bars of
 tation'. The results of the careful researches of Lepsius have also been confirmed hy Professor Credner's geolngical investigations. The genuine
mafkat, which does not occur here, was probably the emerald, while the inferior quality, which was often imitated, was malachite, verdigris, green smalt, and the green colour prepared from the last. The imitation emerald, which is frequently mentioned by ancient authors, was a green paste coloured with copper, which, when groand, yielded the best green paint. This raw material was used by the Egyptians for colouring glass, of which many pieces are preserved, and was probably the malachite which is called by Theophrastus 'false emerald', or copper green; and which, being much used for soldering gold, was named 'chrysocolla'. The inscriptions always mention mafkat with khesbet, i.e. lapis lazuli (either genuine, inferior, or artificial), as the two minerals which are generally found together, principally in association with copper ores, malachite being carbonate of copper with a certain proportion of water, while lapis

lazuli sometimes occurs interspersed with malachite, and sometimes in small nodules by itself. In the Wâdi Maghâra copper was formerly worked, and along with it was doubtless found malachite, which was either used as a precious stone, or manufactured into paint. The district was called the Mafkat (malachite) region, after the most precious mineral obtained in it. The miners were condemned criminals, particularly political offenders and prisoners of war. The relations also of the prisoners were frequently condemned to the mines and compelled to work in fetters. As, at a later period, the Christians were compelled to work in the porphyry quarries, so in the reign of Ramses II. the refractory Israelites were employed in the mines.

Clambering up the rugged slope of the hill from the entrance to the mines, and passing several shafts, we reach a number of figures engraved on the rock, discovered by Prof. Palmer, and consisting of the hawk, the bird sacred to Horus, flve human forms, and
some illegible hieroglyphics. The first figure, now almost obliterated, seems to hold a chisel in its left hand, and may represent a miner; the second wears the crown of Upper Egypt $/$, and the third that of Lower Egypt $\int_{\text {, }}$, both representing Pharaoh as the monarch of S. and N. Egypt respectively. The rope, hammer, and chisel (implements which were still used in the time of the Ptolemies whenever a foundation-stone was laid), which they hold in their hands, show that the king was once present here to inaugurate the opening of a new mine. The shape of the chisel is curious. The fourth and fifth figures represent Pharaoh chastising the miners.

The hill, about 200 ft . in height, opposite to the entrance of the mines, is also worthy of a visit. On the further side are the ruins of Major Macdonald's house, and the summit is crowned with the remains of a fort and of the mining settlement of the period of the Pharaohs. Here also are found various tools of flint, particularly arrow-heads and sharp instruments, which were perhaps used for engraving inscriptions. The old road, once used by the miners, descending the hill and leading towards the $S$., with a bend towards the E., is still traceable. - There is a spring about 25 min . distant from Major Macdonald's ruined house.

Wadi Maghara, a station of the Israelites during the Exodus. The neighbourhood of the Râs Ahû Zenîmeh is believed hy most expounders of the Bible to have been the site of the camp on the Red Sea (p. 246). The sacred narrative (Numb. xxxiii. 11) continues as follows: - 'And they removed from the Red sea, and encamped in the wilderness of Sin. 12. And they took their journey out of the wilderness of Sin, and encamped in Dophkah.' In the hook of Exodus (xvi. 1, et seq.) we find farther particulars of this portion of the journey. We are informed there, that the whole of the people complained bitterly against Moses and Aaron for having led them out of Egypt, accusing them of having hrought them 'forth into this wilderness, to kill this whole assembly with hunger.'

Many authorities identify the wilderness of Sin with the bleak coastplain of El-Kấa, which extends from Râs Abû Zenîmeh to Tûr and beyond it; hut it is more prohahly identical with the desolate, rocky tract which we traversed on the route from Râs Ahû Zenîmeh to the Wâdi Maghâra. Dophkah is the Wâdi Maghâra. Enclosed by bleak and abrnpt rocks, the multitude, accustomed to the extensive plain, would naturally he alarmed and depressed, and would murmur against their leaders.

A little beyond the mouth of the Wâdi Maghâra, the Wâdi Sidr turns to the S., skirting the Jebel Abu ${ }^{\prime}$ Alâka ( 2623 ft .), and after fully an hour leads to a large table-land. To the E., opposite to us, is the mouth of the Wâdi Neba, and to the S. lies the WAdi Mokatteb, i.e. 'Valley of Inscriptions', which we now follow. On the W. side of this broad valley rises the Jebel Mokatteb ( 2380 ft .), at the foot of which, extending down to the floor of the valley, are strewn blocks of sandstone, several of them bearing the famous so-called 'Inscriptions of Sinai'. Most of them are on the western side of the valley. Those who do not intend to make scientific investigations need only devote a few minutes to the inscriptions in passing.

Most of the Sinaitic Inscriptions are in the Nabatæan character, others in Greek, and a few in Coptic and Arabic. They are roughly and superficially engraved on the rock, which has been very rarely smoothed for the purpose, and the small figures are often extremely rade and inartistic. They represent armed and unarmed men, travellers and warriors, laden and unladen camels, horses with and without riders and attendants, monntain goats, ships, crosses, and stars. A priest with raised arms, and an equestrian performer, are worthy of notice. Cosmas (Indicopleustes, or the 'Indian traveller'), who visited the Peninsula of Sinai in A.D. 535 and saw these inscriptions, believed them to be in the Hebrew langnage, and to have been executed by the Israelites during the Exodus, and marvellously preserved by providence, in order that they might serve as 'witnesses to the unbelieving'. The investigations of Beer (d. 1864) and Tuch (d. 1867), however, ascertained that the oldest of these inscriptions cannot have been written earlier than the 2nd century B.C., while the most recent are not later than the beginning of the 4th cent. A.D., and that most of them are to be ascribed to the heathen Nabatæans. who adhered to the Sabæan rites, and worshipped the sun, moon, and stars, especially on high mountains, such as Mounts Serbâl and Sinai. No Christian names occur, but many of the writers call themselves 'servants', 'reverers', or 'priests' of the 'sun', the 'moon', and 'Baal', and other early Arabian divinities. - The authors of these inscriptions were doabtless travellers, partly merchants, and partly pilgrims to the holy places in the Wâdi Mokatteb, among which Mount Serbâl was certainly reckoned at a very early period. Some of the Greek inscriptions are of later date, having evidently been engraved over the Nabatæan. By the figure of a 'Diakonos Hiob', a soldier, who was hostile to the Nazarenes, has written: - 'a bad set of people these; I, the soldier, have written this with my own hand.'

The S. entrance to the Wâdi Mokatteb, a valley about $\mathbf{3 1 / 2} \mathbf{M}$. in length, is closed by a spur of the mountain of that name, which our route crosses. Beyond the pass ( 1520 ft .), whence we obtain an excellent survey of the imposing mass of Mt. Serbâl, the route traverses heights and hollows strewn with small stones. The red rubble looks like fragments of bricks, and the slopes resemble dilapidated walls of loose stones.

After $3 / 4 \mathrm{hr}$. we enter the Wâdi Firản, which is here of considerable breadth. This valley, which is probably the most important in the peninsula, begins above the Oasis of Firrân, at the base of the Serbâl, and, after describing a wide curve, terminates near the coast. The granite slopes, flanking the valley, are not far apart at places, while in other parts the valley expands to a considerable width. The grey primitive rock, veined with reddish-brown porphyry and black diorite, rises in picturesque forms; these veins run almost invariably from $N$. to $S$. The picturesqueness of the scene is greatly enhanced by the imposing summits of the barren mountains towering above the slopes of the valley to the south. At the entrance of the valley, where at the foot of the Jebel Nesrin the small wâdi of that name opens on the left, are several round heaps of stones belonging to ancient tombs. On our right next diverges the Wadi Nedîyeh, on the left the Wâdi er-Remmâneh and the Wâdi Mokhêres, and to the right again the Wâdi el-Feshêheh, the last two being commanded by peaks of the same names. The next valleys on the right are the Wâdis ed-Dêr, Nehbân, Et-Tarr,
and $A b a$ Gerrâyât; and opposite the latter opens the Wâdi Kosêr, a valley of greater extent. A little before reaching the oasis, we pass a rock called the $\boldsymbol{H} \hat{e} g i$ el-Khattâtîn, which is entirely covered with small stones. Prof. Palmer was the first traveller who was told by the Beduins that this rock was the one which yielded water when struck by Moses.

The plants of the desert now occur more frequently, and are of more vigorous growth; bushes of tamarisk, the neble, the seyâl, and palm-trees, make their appearance, and the scene is enlivened by the notes of birds of grey and dark plumage. We now quit the desert, and with feelings of unmitigated delight, after a hot journey of more than 5 hrs . in the Wâdi Fîrân, we enter the Oasis of Firan, the 'Pearl of Sinai', and by far the most fertile tract in the whole peninsula. We first reach the dale of $E l-H e s w e h$, a few hundred paces only in length, watered by an inexhaustible brook which is suddenly swallowed up by the earth here, after having converted the whole of the valley above this point into a luxuriant garden in the midst of the desert. The gardens are watered by means of Shâdûfs or buckets; the dates grown here are celebrated. Every tree has its proprietor, who obtains the whole of its produce, even when he lives at a distance, his property being protected by the honest Beduins of the oasis and the inmates of the monastery. On the road-side, and on the left slope of the valley, are Beduin huts, gardens, and the ruins of stone houses, dating from the time of the ancient Firrân. In $1 / 4 \mathrm{hr}$. more we reach a second small group of palms, and for a few minutes we obtain a view of the $W$. side of Mount Serbal. In 20 min . more we reach a wider part of the valley, in which the rocky and isolated hill of El-Meharret rises to a height of about 100 ft ., bearing on its summit the traces of an early Christian monastery and church. Exactly opposite the ruin of the monastery the traveller should notice a very curious geological formation, consisting of a vein of green diorite in flesh-coloured porphyry, which is in its turn imbedded in green mica-slate. The largest fragment of the ruins, called Hererât el-Kebîr, stands on the summit of the hill which the Beduins regard as the spot where Moses prayed during the battle with the Amalekites (Exodus, $x$ vii. 10), and at its base the relics of a large church are still traceable. Fragments of columns and ornaments, which once belonged to it, are to be found built into the walls of the houses. The Wâdis Ejeleh and 'Aleyât, valleys diverging here, are watered in winter by streams from the mountains which are sometimes covered with snow. This picturesque spot is a favourite haltingplace with the Beduins owing to the facilities for watering the camels. The best camping-ground is a little to the E. of the entrance to the Wâdi 'Aleyât, and in such a position as to command a view of the pinnacled summit of Mt. Serbâl (p. 254).

History. The Oasis of Firân was probably occupied at a very early period by the Amalekites. and outside of its gates was doubtless fought
the battle in which they were defeated by the Israelites. The town of the oasis is even called by Makrîzi a city of the Amalekites, long after the Christians had been expelled from it by the Muslims. The oasis is mentioned by Diodorus only before the Christian period, but in the 2nd cent. A.D. Claudius Ptolemæus speaks of the town of Pharan, which soon became an Episcopal See and the central point of the monastic and anchorite fraternities of the peninsula. Remains of old monasteries and hermits' cells are nowhere more numerous than here, and on the rocky slopes and plateaus of the Serbâl. In the 4th cent. we hear of the town being governed by a senate, and about the year 400 the spiritual affairs of the country were presided over by Bishop Nateras or Nathyr. The council of Chalcedon accorded to the oasis an archbishop of its own, who, however, was subordinate to the recently founded patriarchate of Jerusalem. In 454 Macarius is mentioned as Bishop of Pharan. The solitary monasteries among the mountains suffered frequently from the attacks of the Blemmyes and Saracens, who, however, did not venture to attack the well-guarded city of the oasis, which paid tribute to their shêkhs. The Romans were nominally masters of Pharan, but in reality it was subject to the sway of the Saracen princes; and one of these, named Abokharagor, presented it to Justinian, who, as a reward, appointed him phylarch of the Saracens of Palestine. Early in the 5th cent. the monks and anchorites of Pharan began to embrace heretical principles, and we frequently hear of admonitions and threats directed by the orthodox synods and the Emperors against them as Monothelites and Monophysites. - According to the trustworthy testimony of Procopius, his contemporary Justinian (527-565) was not the founder of the present monastery of Sinai, as inscriptions of the 13th cent. built into its walls erroneously state, but he erected a charch to the Virgin halfway up the Jebel Mûsa, probably on the site of the present chapel of Elijah, and also constructed and garrisoned a strong fortress at the foot of the monntain, on the site of the present monastery of St. Catharine, in order to prevent the Saracens of the peninsula from invading Palestine. It was doubtless the protection afforded by this castle that gradually attracted the nnmerous hermits of the peninsula from the Serbâl to the Jebel Mûsa, which they made the scene of a namber of old Christian legends. Pharan was at an early period regarded as the site of the Rephidim of the Bible (see below). Eusebius of Cæsarea (b. 270), and his translator Jerome, state that the battle of the Amalekites took place near Pharan. Cosmas (535), who visited the oasis in person, states that Rephidîm, where Moses struck the rock, lay near Pharan, and the account of Antoninus Martyr of his entry into Pharan shows that regularly organised pilgrimages to Rephidim took place. Among other objects the natives offered small casks of radish-oil (Rhaphanino oleo) to the pilgrims, which were probably carried off as mementoes of Rephidîm, as its name (raphanus, raphaninas) imports. - After the dissemination of El-Islâm the anchorites gradually became extinct.

Rephidîm and the Bible Narrative (comp. p. 250). In the Book of Numbers (xxxiii. 13-14) we find the following passage: 'And they departed from Dophkah, and encamped in Alush. And they removed from Alush, and encamped at Rephidim, where was no water for the people to drink ${ }^{\text {² }}$. Alush was probably situated between the Wâdi Maghâra and the Wâdi Fîrân, and Rephidîm in the Wâdi Fîrân at the entrance of the oasis. The 17th chapter of the Book of Exodus contains important additional information. We are there informed that the people murmured against Moses, and reproached him with having led them out of Egypt to die of thirst; whereupon 'Moses cried unto the Lord', who commanded him to strike the rock with his staff. And Moses did so, and the rock yielded a copions spring. Amalek then came and fought with the Israelites at Rephidîm, and the battle is described. The Bible narrative presents to us a picture of Moses stationed on a rock which commanded the battle-field, and praying, while Aaron and Hur 'stayed up his hands'; and we are told, that when he raised his hands, Israel had the mastery, and when he let them fall, Amalek had the mastery. 'And Joshua dis-
comfited Amalek and his people with the edge of the sword'. - lt is natural that a battle should have been fought on the outskirts of the oasis, as the Amalekite possessors of this fertile island in the midst of the desert would be very unlikely to yield up their valuable property without a blow. We are then informed (Exodus xviii.), that Moses, 'where he encamped at the mount of God', organised the people by the advice of Jethro, his father-in-law, who came to visit him, and chose valiant men from all Israel, whom he set over them 'to be rulers of thousands, and rulers of hundreds, rulers of fifties, and ralers of tens'. 'And (Numb. xxxiii. 15) they departed from Rephidîm, and pitched in the wilderness of Sinai', and (Exodus xix. 2) 'they were departed from Rephidîm, and were come to the desert of Sinai, and had pitched in the wilderness; and there Israel camped before the mount. And Moses went up unto God'.

The most conspicuous of the hills visible hence is the Jebel et- Tahâuneh (or Mill-Mountain), situated in a line with the monastery hill ( to the N.), rising above the bed of the valley to the height of 700 ft ., and crowned with the ruin of a handsome church. The steep, neglected path ascending to it is flanked with the remains of ancient chapels; and near it are many houses built of loose stones. The windows of these look towards the outside, and not into the court according to Oriental usage. The settlement is enlivened with children, poultry, and dogs, and with its babbling brook almost resembles a Tyrolese mountain village. Farther N. rises the summit of the lofty Jebel el-Benât ( 4917 ft .), or the 'Mountain of the Virgins', sometimes called the Jebel el-Bint, or 'Mountain of the Virgin'. It is probably so called from a chapel of the Virgin situated here, but the Beduins maintain that it derives its name from two Tâwara maidens, who had been ordered to marry against their wishes, and who therefore fled to the mountains. They were overtaken by their pursuers on the Jebel el-Benât, but, rather than be captured, they plaited their tresses together and precipitated themselves from the rocky summit into the abyss. - On the $N$. side of the valley are numerous tombs of hermits and monks who spent their lives on Mt. Serbal and in the monastery of the bishopric of Pharan. These tombs are mentioned by Makrîzi so early as 1445. Prof. Palmer re-discovered them, and observed that the bodies had been buried in a line from E. to W., in coarse shrouds and coffins of which traces remained.

Mount Serbâl ( 6712 ft ; ; ie. Serb Ba'al, or 'palm-grove of Baal') rises to the $S$. of the Oasis of Firân in the form of a broad, serrated pyramid. The ascent is difficult and fatiguing, and should be attempted by experienced mountaineers only, with guides. The expedition takes a whole day (the ascent 5 hrs.), so that the start should be made before sumrise. Strong boots are essential, the rocks being hard and sharp. The ascent is most conveniently made through the Wâdi Aleyât on the N.E. side. The old Derb es-Serbâl, or Serbâl route, being now impracticable, there is no proper path. The route at first follows a narrow path, and traverses ridges of rocks, hollows, and ravines, and small plains watered with springs and
richly clothed with vegetation. It passes several cells of anchorites and traces of walls, and then, for 3 hrs ., ascends rapidly through the Wâdi Abû Hamâd (or valley of the wild figs). The ascent of the actual summit ( $3 / 4 \mathrm{hr}$.) is extremely laborious, and should not be attempted by persons inclined to giddiness. The veins of diorite afford the best footing. The traveller should observe the caverns in the rock which were once occupied by hermits, the ruins of their huts, the Sinaitic inscriptions, and the traces of old paths, and of a flight of steps, particularly near the summit.

The highest of the five peaks which form the summit of Mt. Serbâl, and which are separated by deep ravines and chasms, is called El-Medauwa (the 'beacon-house'). Fires used to be lighted here either in honour of Baal, or, as Prof. Palmer conjectures, to warn the anchorites of approaching danger. Many Sinaitic inscriptions still exist here. On the lower terrace of the peak is an artificial circle of stones in which the beacon-fires were probably lighted. - The Vibw from the summit is very imposing; towards three points of the compass the prospect is unimpeded, but towards the S. it is concealed by the intervening pinnacles of Mt. Serbal and the still higher Mûsa group. Towards the E. we survey the Bay of 'Akaba and part of the arid territory of Arabia; towards the $\mathbf{N}$. lies the interminable desert plateau of Tîh, stretching to the distant heights of Petra; and towards the W. are the Bay of Suez, and the hills between the Nile and the Red Sea. 'Every detail of these remarkable formations is distinctly visible hence. The wâdis, including the long, crescent-shaped Wâdi esh-Shêkh, are seen turning and winding in every direction. The innumerable hills stand forth in prominent relief, with as well-defined colours as in Russegger's geological plan which we held in our hands; the dark granite, the brown sandstone, the yellow desert, the strips of vegetatiou flanking the Wàdi Fîràn, and the solitary green spot occupied by the large groups or̈ palms of Rephidîm (assuming its identity to be established), are all surveyed at a glance'.

Geological Formation. According to Fraas the chief formations of Mount Serbal are: - (1) Gneiss of grey colour and very fine grain, the component parts of which are uniformly distributed, the mica giving it a somewhat stratified appearance; (2) Red granite of great beauty, containing little or no mica; (3) Diorite porphyry, which frequently veins the masses of gneiss and granite. The following are the principal forms of diorite: - (1) Black diorite porphyry; (2) Dark green', and somewhat dingy diorite; (3) Diorite resembling porphyry; (4) Polyhedric porphyry of a pale-red colour, containing occasional crystals of albite, and a few grains of quartz; (5) Porphyry varying in colour from brownish to bloodred, and rough and granulated to the touch; (6) Porphyry in which pieces of oligoclase, about an inch in length, are imbedded. Turquoises of finer quality than those in the Wâdi Maghâra are also found here.

Is Mount Serbâl the Sinai of Scripture? The traveller is reminded that during the battle of the Amalekites, Moses prayed on a rock of H .reb, that he received Jethro after the battle, when the people were encamped by the Mount of God, and that from the entrance to the oasis (Rephidîm) to the foot of Mt. Sinai one day's journey only is reckoned, while a large caravan takes two days to reach the Jebel Mûsa, and lastly,
that a person acquainted with the peninsula, as the leader of the Israelites undoubtedly was, would scarcely have acted wisely, if, while receiving the tables of the law, he had compelled the mnltitude entrnsted to his care to encamp for a prolonged period far from the best watered and most frnitful spot on the whole route. As, moreover, Mt. Serbâl is by far the most imposing mountain in the peninsula, as many traditions declare it to be the scene of God's revelation to Moses, as it has long been regarded as holy, as Eusebins, followed by Cosmas and other Christian anthors, identifies it with the Horeb of the Bible, and as Pharan and Sinai are always associated in the monkish chronicles and the resolutions of the Conncils, it would seem more justifiable to identify Mt. Serbal with the Sinai of Scripture, than the Jebel Mûsa group. If Mt. Serbal is the Sinai of Scripture, Moses must have condncted his people from Rephidîm through the oasis, where both space and water were inadeqnate to their wants, and through the defile of Bnwêb, into one of the neighbonring plains in the Wâdi esh-Shêkh, whence the mountain is visible in all its majesty. Whilst we are almost snrrounded by an amphitheatre of hills of moderate height, the imposing rocky mass of Mt. Serbâl, towering above them all, rises to the S.W., being more prominently and distinctly visible here, than from any other part of the peninsnla. 'Monnt Serball', observes Prof. Palmer, 'seen from a little distance, exhibits such boldness of outline, and such huge and conspicuous forms, that it is justly entitled to be considered the grandest and most characteristic featnre of the peninsula'. Althongh the traveller mast not expect to be able to identify on Mt. Serbal every spot referred to in the Scriptural account of the promulgation of the law, there is no donbt that the general topography of the district harmonises well with that narrative. On again referring to the book of Exodus (xix. 17), we find this passage: - 'And Moses brought forth the people ont of the camp to meet with God; and they stood at the nether part of the mount'. We shall see that there would have been no room for such a movement in the wâdis Er-Râha or Sebârîyeh, adjoining the Jebel Mûsa group, whereas it was possible, and even necessary, to lead the people who were encamped beyond the oasis, towards the foot of the monntain before us, perhaps as far as the hill of Meharret and the lower part of the Wâdi "Aleyât. No one can look npon the conspicnons and majestic Mt. Serbâl, withont being convinced that it was far more worthy of being the throne of Jehovah, than any of the less imposing peaks of the Jebel Mûsa gronp. If it be asked, how the glorions title of the 'Monnt of the Lord' came to be transferred from one monntain to another, the qnestion may be answered without much difficulty. When the early Christians settled in the peninsula, they found no memorials of the Exodns, but arbitrarily assigned Old Testament names to the various hills and valleys, a practice which, as we shall afterwards see, was imitated to excess by the monks of the monastery of St. Catharine on the Jebel Musa. One group of anchorites identified Mt. Serbâl, and another the imposing mountain sitnated farther to the S., with 'Mount Horeb'. As long as Pharan was a powerful place and an episcopal see, its right to claim the title was generally recognised, but after it had lapsed into heresy, this right was denied by the orthodox church, and the hermits of the Jebel Mûsa group were expressly recognised as the genuine Sinaites, for whose protection Justinian cansed a castle to be built. The anchorites and Cœnobites of Mt. Serbâl, who were decimated by the frequently recurring attacks of the Saracens, accordingly emigrated to the Jebel Mûsa for safety. We have already cited a remarkable passage of early date, in which it is expressly stated, that the monks of Sinai had emigrated from another monntain, and had settled on the modern Sinai by God's command. These views were expressed for the first time, and are fully discussed in the writings of Lepsins, the distingnished German Egyptologist. Many critics have since adopted the same theory.

Leaving the Meharret hill (see p. 252 ), we proceed towards the N.E. under palm-trees. The ground becomes soft, and is carpeted

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with turf, moss, and reeds, interspersed with blue and red flowers. We pass rich fields of wheat, besides tobacco and other industrial crops; the bushes are enlivened by birds, and flocks of sheep and goats lie by the side of the brooks under the shade of the trees. After 1 hr . the palm-trees leave off, and are succeeded by a thicket of țarfa shrubs, which we traverse in $1 / 4$ hour. Many of these shrubs assume the form of trees, $21 / 2-3 \mathrm{ft}$. in circumference.

It is only in the lower part of the Wadi esh-Shêkh (p. 275), and here in its prolongation, the Wadi Firân, so far as the latter is watered by the brook, that these tarfa plants yield the well-known Manna. Minute holes are bored in the fine bark of the thin, brown twigs, by an insect (Coccus manniparus) which was first observed by Ehrenberg, and from the almost invisible openings issues a transparent drop of juice, which then falls off and hardens in the sand. This sweet gum, resembling honey, which is still called 'man' by the Arabians, is collected and preserved in considerable quantities; the monks in the monastery generally keep a supply, partly for their own ase, and partly for sale, in tin boxes. In 1845 Lepsius found the whole valley fragrant with manna as early as the end of March, but it is usually most plentiful from the end of April to the end of June, and the more so in proportion to the moisture of the preceding winter.

Adjoining the rocky slopes on the left rise numerous tentshaped mounds of earth, upwards of 100 ft . in height, which Fraas takes to be the remains of ancient moraines. After $1 / 2 \mathrm{hr}$. the Wâdi el-Akhdar (p. 277), leading towards the E., diverges to the left. Opposite to it opens the Wâdi Rattameh, to the W. of which rises a hill situated to the $\mathbb{S}$. (right) of the road, called the Jebel el-Munâja, i.e. 'Mountain of the conversation between God and Moses'. The Arabs still offer sacriffees here to Moses within a circle of stones on the summit of the hill, singing - ' 0 mountain of the conversation of Moses, we seek thy favour; preserve thy good people, and we will visit thee every year'. Farther to the E. we reach in $1 / 4 \mathrm{hr}$. the defle of $E l-B u w \hat{e} b$, i.e. little gate, or $E l-B \hat{a} b$, i.e. gate, where the valley contracts to a width of about 20 ft . The Wàdi Fîrân terminates here, and the Wâdi esh-Shêkh (p.275) begins.

The part of the Wâdi Fîrân between the Buwêb and the Hererât, which now forms the most fertile oasis in the peninsula, was once a lake, as is proved by the deposits of earth, $60-100 \mathrm{ft}$. in height, in the angles of the valley throughout its whole distance, a feature observable nowhere else. In consequence of the peculiar configuration of the surrounding mountains, including the Jebel Mâsa group and the Serbâl, every fall of rain, snow, and dew in the whole neighbourhood of this extensive region, found its way through different channels into this basin; and, after the barrier at Hererât had been removed, the brook still remained as a relic of the ancient lake. The sudden appearance of this streamlet in the rocky valley, and its as sudden disappearance in the rock at El-Hesweh, must have been a constant source of wonder to the vivid imagination of the inhabitants of the desert, and it therefore seems natural that the phenomenon should have been ascribed to the miraculous rod of Moses.

Two routes lead from El-Buwêb to the Sinai monastery. The easier, through the Wâdi esh-Shêkh ( 11 hrs . to the monastery), is more suitable for the return-journey viâ Şarbût el-Khâdem (p. 277); the other, rougher ( $101 / 2$ hrs. to the mouastery), but more picturesque, leads through the Wâdi Selâf and across the interesting Nakb el-Hâwi. We select the second of these routes.

The Wàdi esh-Shêkh, which frequently expands into picturesque basins, soon diverges to the N.E. (see p. 275), and we reach ( $1 / 4 \mathrm{hr}$.) the entrance to the Wádi Selàf, a monotonous and winding valley through which our route runs for nearly 6 hours. On the right opens the Wâdi er-Rimm, ascending to Mt. Serbâl, and on the same side the Wâdi Umm Tâkha, containing several curious stone-huts in the form of beehives, called 'nawâmîs', to which the absurd tradition attaches, that the Israelites sought refuge in them from tormenting flies. In less than 2 hrs . we reach the Wâdi ' $E_{j j} \hat{a} w i$, through which the road from Tûr (p. 272) on the Red Sea joins our route from the S.W. M.. Serbâl now at length becomes visible in all its majesty, and remains in sight behind us for $1 / 2$ hour. We next pass the Wâdi $A b u$ Ṭallib to the left, at the entrance of which the prophet Mohammed, when he was marching against Syria (Shâm) with his uncle Tâlib, is said to have rested. Several other small wâdis are passed on the right and left. At the upper, end of the valley at the foot of the Nakb el-Ḥ̂wi Pass, there is a good camping-place, commanding a fine distant view of Mt. Serbâl. At this point begins the ascent of the Nakb el-Háwi Defile ( 4930 ft .), occupying $21 / 2 \mathrm{hrs}$., though an active walker might reach the top in one hour. The camels progress very slowly in this narrow, steep, rocky pass, so that the traveller will find it pleasanter to dismount, and walk up the hill. The granite rocks on each side, weathered into singularly fantastic forms, are upwards of 800 ft . in height; the gorge is strewn with stones of all sizes; the camel-path skirts the hard and uneven cliffs which bound the gorge. Lepsius has proved that the laborious task of making this path was first undertaken by the Christian monks. The torrents in this rocky gorge in winter are often so violent as to carry everything before them. The last part of the ascent is less precipitous, and we now observe a few traces of vegetation. The rocks here also bear some Sinaitic inscriptions.

At the upper end of the defile the barren cliffs of the Sinai group become visible, and a view is at length obtained of the ErRáha Plain, surrounded by lofty mountains, and not unlike a huge amphitheatre. At the end of the valley rises the bold and conspicuous rock, known as the Râs es-Şafsâf (p. 268). If this be regarded as the true scene of the promulgation of the law, then the plain of Er-Râha, which we reach by at first descending a little, and afterwards ascending, the path improving as we advance, must be identified as the camping-place of the Israelites. A darkgreen spot, in which antimony is probably to be found, is called Kohli after that mineral. After having crossed another slight eminence, we reach the sand of the plain. A block of rock lying here (perhaps an old boundary stone), bearing peculiar marks, is the subject of an Arabian tradition, to the effect that the Gindî tribe, having been unjustly treated by the monks of
the monastery of St. Catharine, who favoured the Jebelîyeh (p. 259), struck their lances into this block in token of confirmation of the oath of their Shêkh, that the monks should never pass this stone. About $11 / 2 \mathrm{hr}$. after leaving the summit of the Nakb elHâwi, we pass, on the left, the mouth of the Wâdi esh-Shêkh (p. 275), which is commanded by the Jebel ed-Dêr (p. 275) on the E. The gorge, called the Wâdi ed-Dêr, or the Wâdi Shucaib (valley of Jethro), ascending gradually, and closed by the hill of Munâja, opens before us. To the left of its entrance rises the hill of Hârûn, on the summit of which Aaron (Hârûn) is said to have set up the golden calf. In the vicinity are the remains of stone huts, built by 'Abbâs Pasha in 1853 and 1854 for the workmen and soldiers who attended him. We enter the Shuraib valley, flanked by enormous cliffs of reddish-brown granite, towering to a dizzy height. In $1 / 2 \mathrm{hr}$. more we reach the terraces of the green garden of the monastery which lies to the right of the path, and the caravan stops in front of the monastery.

## 2. Monastery of St. Catharine on Mt. Sinai and its Environs.

Accommodation. Formerly, when the monks were frequently attacked by the Beduins of the peninsula, visitors were drawn up into the monastery through an opening over the gate, which was always carefully closed, by means of a rope with a wooden cross attached to the end. At the present day the traveller presents the letter of introduction which he has obtained through his Consulate at Cairo, and is admitted by a side-door. The Beduins and camels remain outside. The monastery contains visitors' rooms, beds, sofas, and a kitchen. If the dragoman has undertaken to provide for the party throughout the whole journey, he must make his own bargain with the monks, to whom the traveller may afterwards present a gift on his own account. Those who have to pay their own expenses, are generally charged at least 20 pias. a day each for lodging alone. It is healthier during the cold nights in these mountains in spring, as well as more interesting, to lodge in the monastery; but the traveller will find it more independent and less expensive to camp in some suitable spot in the lower Wấdi Shu'aib.

Two or three days at least should be spent at the Monastery. The easiest ascent in the neighbourhood is that of the Jebel Masa (p.267), which is usnally combined with a visit to the Ras es-Safsaf. The 'Sacred Places' in the Leja Valley ( $\mathbf{p} .269$ ) should also be visited. The ascent of the Jebel Katherin (p. 270) is more difficult. - The Jebelîyeh, as the servants of the monks are called, are excellent guides, and will accompany the traveller for a trifling fee, carrying the necessary provisious. Sportsmen who wish to shoot the mountain-goat, which abounds here, may apply to the intendant of the monastery, who will provide them with a suitable guide.

History of the Monastery. At an early part of the Christian period a number of anchorites settled here amid the springs of these rocky mountains, and prononnced the Jebel Mûsa to be the Mountain of the Lord. As early as the 4th cent. they were terribly persecuted, and stories are told in connection with the Dèr el-Arbarîn (monastery of the forty) in the Wâdi Leja ( p .270 ) of the cruel attack which cost 38 or 40 Cœnobites their lives (p. 256). While Mt. Serbâl afforded a better situation for monastic settlements, Mt. Sinai attracted numerous anchorites and hermits, owing to its seclusion and greater safety, especially after Justinian, according to the statement of Procopins, his private secretary, and that of Eutychius (Sarid îbn el-Batrik, 9th cent.), had erected the church of the Virgin already
mentioned and a castle, in A.D. 530, for the protection of the monks and the neighbouring region against the attacks of the Saracens. The emperor is said to have been so dissatisfied with the site chosen by the architect, that he caused him to be beheaded. He justly objected that the fortress was commanded by the slope of the valley rising immediately above it. The desire attributed to Justinian, that the slope should have been removed, and the execution of the architect in consequence of his answer - 'if we spent the whole treasnres of Rome, Egypt, and Syria, we conld not level the mountain', are by no means characteristic of so sagacious an emperor. The monastery might certainly have easily been destroyed by rocks rolled down from the E. slope of the valley. Justinian and his wife Theodora are also said to have fonnded the Church of the Transfiguration (p. 262). The monastery was also greatly benefited by a gift from Justinian of a hundred Roman, and a hundred Egyptian slaves, with their wives and children. From these retainers are descended the Jebelîyeh, who still render service to the monks, but are despised by the Beduins and stigmatised as 'Nazarenes' and 'fellâhîn'. Although originally Christians, and living under the snpervision of their monkish masters, they could not be prevented from embracing El-lslâm, which they all now profess. ln the reign of the Khalif 'Abd el-Melik ibn Merwân there seem to have been many compulsory conversions to Mohammedanism, which cost many lives; but the shrewd monks contrived to ward off their Mohammedan persecutors, by pretending that they had accorded a hospitable reception to the prophet on one of his jonrneys, that one of the monks of Sinai had predicted his future career, and that the prophet had given them a letter promising them the protection of his followers. The document is said to have been written by 'Ali, and to have been impressed with the blackened sign manual of the prophet, who could not himself write. Sulṭ̂n Selîm is reported to have carried the document to Constantinople, after the conquest of Egypt, for the purpose of enriching his collection of relics, and to have sent the monks, in its stead, a copy authenticated by his own seal; this copy is also said to have been lost, bnt another copy of very doubtful genaineness is now preserved in the monastery of the order at Cairo. The mosqne, which stands within the walls of the monastery, is said to have been built in order to induce Sultần Selîm (d. A.D. 1520) to abstain from his purpose of destroying the monastery, within the walls of which a yonng Greek priest, to whom he was attached, had died. The mosque, however, has been proved to have existed at least a century and a half earlier than the reign of Selîm, having donbtless been built out of consideration for the Muslims, whom it was absolutely necessary to conciliate. So far was this policy carried, that when King Baldwin I. of Jerusalem wished to visit Mt. Sinai during the Crusades, at the beginning of the 12 th cent., the monks entreated him to give ap his intention, as such a visit might excite the suspicion of the Muslim rulers, and prove detrimental to the monastery. Several Bednin tribes of the peninsnla were constituted the well-paid 'Ghafirs', or guardians of the monastery, one of their duties being to escort the caravans of pilgrims, a great nnmber of whom visited the sacred places in the middle ages. The Egyptian government also, even during the Mameluke period, entered into friendly relations with the monks, partly in consequence of the pretended letter of the prophet which they possessed, partly for the sake of ensuring the safety of the Mecca pilgrims, whose route passed the territory of the monks, and partly from its desire to protect those places which were regarded as sacred by Christians and Muslims alike. Down to the reign of Mohammed 'Ali, whose patronage they enjoyed, the monks were entitled to part of the custom-house dues levied at Cairo, and that city had to supply them with the materials for their gowns; and they still enjoy the privilege of conveying their property to or from Cairo free of dnty. 'Abbâs Pasha visited Mt. Sinai in 1853, and formed the extravagant plan of building himself a villa on a rock of Mt. Horeb (comp. p. 266), bnt he was assassinated in 1854 before his design could be carried out. Although a fanatical Muslim, he did not scruple to pray in the charch of the Transflguration at the

## ENVIRONS of the MONASTERY DF M? SINAI and of the JEBBL MU'SA.


'Place of the Burning Bush'. The safety of the monks is now perfectly insured, partly owing to the favour shown to the Christians by the Egyptian government, and partly to the protection of Russia. - Notwithstanding the ample revenues of the monastery, the number of the monks has greatly diminished. In the 14th cent. it is said to have contained 3-400 inmates, together with a prelate and an archbishop, but the number is now reduced to $20-30$ only, who are chiefly natives of the Greek islands, where the monastery possesses estates, particnlarly in Crete and Cypras. - The most famous offshoot of the monastery of the Wâdi Shuraib is that of the Sinaites at Cairo, but the monks also maintain constant communication with the other churches of their order, which are scattered over a great part of the East. Thus we find fraternities in Roumania, Servia, Turkey (Constantinople), the Greek Archipelago, in Greece itself, and even in India, closely connected with the monastery of Mt. Sinai. The order belongs to the orthodox Greek church, which regards Sinai as no less sacred than Jerusalem.

The Monastic Rule is very strict. The monks are prohibited from partaking of meat or wine, and even oil is forbidden during the long fasts; but they are permitted to eat fish, and to drink an excellent liqueur which they prepare from dates ('Araki). They assemble for prayer twice during the day, and twice during the night. Women were formerly rigorously excluded, and even cats and hens, as belonging to the same obnoxious sex. Female pilgrims, however, and enterprising lady tonrists, are now lodged without difficulty in the rooms set apart for visitors. The monastery is presided over by an archbishop, who is elected by the monks here and their brethren in Cairo; the election, however, requires confirmation by the Patriarch of Jerusalem, who recently exercised his right of veto in a very emphatic manner. Between 1760 and 1872 no archbishop resided on Mt. Sinai, as, in accordance with ancient treaties, large sums had to be paid and gifts presented to the Beduins upon the installation of every new prelate. After a lapse of 112 years a new archbishop (Kallistratos) was installed in the monastery in 1872, but his election was attended with great difficulties. If the quaint old writer Schiltberger of Munich (1394-1427) could have foreseen these modern events, he would hardly have recorded the following miracle: - 'A great wonder takes place in the monastery, where there are many monks, who have as many lamps, which are always burning. And when a monk is about to die his lamp begins to wane, and when it goes out, he dies. And when the Abbot dies, the monk, who sings his praise after the mass, finds on the altar a letter on which is written the name of the man who is to be Abbot. And the lamp of the dead Abbot thereupon lights itself.' The absent archbishop is represented by a prior or wekîl, but the affairs of the monastery are actually managed by an intendant. Most of the monks, who are quite uneducated, practise some handicraft; and they are most successful in the distilling of brandy, and in gardening. Among them are also a tailor and a shoemaker who charge exorbitantly for their primitive workmanship. The bread of coarse flour is also baked on the premises. Many of the monks spend a few years only on Mt. Sinai, after which they return home as 'martyrs'. The monastery is also considered as a kind of penal establishment. The healthy monntain air enjoyed by the inmates of the monastery of St. Catharine has always contributed greatly to their longevity, but most of them suffer from rheumatism.

The Monastery of St. Catharine on Mt. Sinai, an irregular pile of buildings, lies 5014 ft . above the sea-level, on the N.E. granite slopes of the Jebel Mûsa or Mount Sinai, in the Wâdi Shu'aib or valley of Jethro.

The monastery was often destroyed and rebuilt, and consequently exhibits great incongruity of form; we therefore find cubical capitals and round arches, pointed and flat roofs, and a church and mosque in close contact with each other. The whole building pre-
sents the appearance of a fortress externally, but the bold and menacing defences consist of the walls of houses, and massive walls of stones connecting the different buildings, which take the place of a regular rampart. The apartments occupied by the monks, pilgrims, and travellers, are situated on the first floor of the houses, which are only one room in depth, their doors being connected by a long, wooden gallery. The whitewashed walls bear numerous Greek inscriptions, some of which were written by a monk of Athos, named Cyril, who was formerly librarian here. The different buildings are separated by small courts; one of these contains a well, and a small group of apricot trees enclosed by stakes. The low buildings are commanded by a lofty cypress. From the embrasures in the walls and ramparts a few small cannons still frown on the now peaceful 'Saracens'. In the midst of the buildings is situated the church (see below), with its handsome tower, adjoining which is the ill-preserved mosque. The wells yield excellent water, particularly one in a shed at the back of the church, which the monks point out as the one at which Moses watered the flocks of Jethro's daughters.

The Church of the Transfiguration is an early Christian basilica. The exterior is uninteresting. In the centre of the $W$. side, which forms a kind of façade, a large cross, with a window in the centre, takes the place of the usual rose-window; and on each side of it is a palm-tree engraved on the stone. - The church is entered by a porch, and a flight of steps descending beyond it, both of which have been restored. In the middle of each of the topmost steps is a letter of the name of St. James ('I-A-K- $\Omega-B-0-\Sigma$ ). - We first enter a vestibule (narthex) with a Byzantine window, containing a large modern basin for holy water, with small silver eagles. The framework of the door leading into the nave is richly decorated and the panels are embellished with old pictures in enamel, of small size. The basilica, which we next enter, notwithstanding the lowness of its aisles, and the superabundant decoration peculiar to Greek churches, is not devoid of effect. Each of the lofty walls bearing the entablature of the nave rests on thick columns of granite, covered with stucco and painted green, the capitals of which are adorned with boldly executed foliage. The ceiling has been re-painted, and divided into bright coloured sections containing indifferent medallion figures of John the Baptist, the Virgin and Child, and the Saviour.

The Aisles are lighted by five Byzantine windows on each side, and are covered by a sloping roof. A coloured Marble Pavement in the nave now replaces one of admirable mosaic which was destroyed by Arabian treasure-seekers. Adjoining the third column on the left side of the nave is a marble Pulpit adorned with pleasing miniatures, which was presented to the church in 1787. Near the fourth column on the right is the Episcopal Throne, dating from
the last century, and interesting on account of a representation of the monastery at that period, painted by an Armenian artist, and held by figures of Moses and St. Catharine. The inscription repeats the date 527, which is erroneously stated by the monks as that of the foundation of the monastery by Justinian (p. 260). Between each pair of columns are rudely-carved choir-stalls. From the ceiling are suspended three candelabra, which are lit at the evening service and made to swing from side to side; also a hundred lamps of every shape and size, some of which are adorned with ostriches' eggs, and so low, that they may be reached with the hand. The raised Tribuna projects into the nave far beyond the choir. A wooden Screen ('septum'), coloured blue, yellow, and red, and overladen with carving, with a broad gate flanked with gilded columns and rich ornamentation, separates the choir from the nave and aisles. The large crucifix, reaching to the ceiling, bears the figure of the Saviour, painted in bright colours. The candelabra, placed in front of the screen and covered with red velvet, stand on very ancient bronze lions of curious workmanship, perhaps executed before the Christian era. - The beautiful rounded Apse is adorned with *Mosaics of great value, executed by European artists as early as the 7th or 8th century. The most important of these, which, like the others, is well preserved, is the Transfiguration of Christ, in memory of which the church was originally consecrated. In the centre of the mosaic the youthful and somewhat commonplace figure of the Saviour soars towards heaven. Elijah, the prophet of Mt. Sinai, is pointing to the Messiah; St. John kneels at the feet of his master; Moses points to the latter as the fulfiller of his law, and St. Peter lies on the ground, while St. James is kneeling. Each figure is accompanied by the name of the person it represents. A kind of frame is formed to this picture by a series of busts of prophets, apostles, and saints in mosaic, admirably executed : -

1. John, the Deacon; 2. Lake; 3. Simon; 4. James; 5. Mark; 6. Bartholomew; 7. Andrew; 8. Paul; 9. Philip; 10. Thomas; 11. Matthew;
 of the monastery; 15. Daniel; 16. Jeremiah; 17. Malachi; 18. Haggai; 19. Habakkuk; 20. Joel; 21. Amos; 22. David; 23. Hosea; 24. Micah; 25. Obadiah; 26. Nahum; 27. Zephaniah; 28. Zachariah; 29. Isaiah; 30. Ezekiel.

Above the apse, on the right, Moses kneels before the burning bush ; on the left, he stands before Mt. Sinai, with the tables of the law in his hand. Between these scenes and the arch of the apse hover two angels adjoining two medallion figures (perhaps Moses and St. Catharine), which the monks point out as portraits of Justinian and Theodora, although they do not in the least resemble other portraits of the emperor and his wife. Under the scene of the Transfiguration is an inscription ('Ev bvó $\mu a \tau t$ Пaгpòs xai Yiõ


$\dot{\eta}$ younévou) to the effect that the mosaic was executed under
Longinus, the Presbyter and Superior of the monastery, for the salvation of the souls of those who had contributed towards the cost of the work.

Among the sacred utensils in the choir are a finely executed Ciborium, or stand for the communion chalice, and a short marble sarcophagus said to contain the head and one hand of St. Catharine, who is specially revered by the Greek orthodox church. Here, too, is shown a valuable, but unpleasing reliquary, presented by Russian Christians. The head of St. Catharine is represented on a silver pillow, her face and hands being enamelled. Another similar reliquary, bearing a figure of the saint in gilded silver, was presented by the Empress Catharine of Russia.

The Chapel of the Burning Bush, at the back of the apse, marking the spot where God is said to have appeared to Moses, is probably the oldest part of the structure. Visitors must remove their shoes before entering. The walls are covered with slabs of porcelain. The spot where the bush is said to have stood is indicated by a plate of chased silver; over it is placed a kind of altar, within which are suspended three burning lamps. At the back of this sanctuary is a small niche adorned with figures, in a line with the apse, the semicircular wall of which encloses the whole E. end of the building. A ray of the sun is said to enter this sanctuary once only in the course of the year, gaining admission through a cleft of the rock on the E. side of the valley. From a cross erected there the hill has been named the Jebel ess-Şalîb.

The Chapels surrounding the nave contain no objects of interest. Each is dedicated to an evangelist, saint, or martyr (SS. Anna, the holy martyrs of Sinai, James, Constantia and Helena, Demetrius and Sergius). Adjoining the right aisle of the basilica are the chapels of SS. Simon Stylites, Cosmas, and Damianus; adjoining the left aisle are those of SS. Anna, Marina, and Antipas. The chapel for the Latins, near the visitors' rooms, is now disused, as the Roman Catholics no longer make pilgrimages to this monastery.

The Mosque, a building of simple construction, is badly preserved. The stone wall of an out-building near the mosque and an arch between the mosque and the church still bear several coats of arms in the early medirval style, perhaps those of Crusaders.

Opposite is the Chapel of the Panagia, which contains several portraits of bishops and archbishops of Sinai and a large model of a projected reconstruction of the monastery. It is now, however, very problematical whether this scheme of reconstruction will ever be carried out, since the property of the convent in Russia and Walachia has been secularised.

The Library of the monastery, which is sadly cramped for want of room, is more valuable than many better arranged and outwardly more imposing collections in Europe. Amoug its treasures are a
great many Greek and Arabic MSS., besides others in Syrian, Athiopian, Persian, Armenian, Slavonic, and Russian. The most valuable MSS., however, are kept stored away in cases, and the only ones exhibited to visitors are a few 'show' pieces in the treasury and a selection of comparatively uninteresting modern MSS. in a room adjoining the archbishop's house. Implicit belief should not be vouchsafed to all that the monks have to say about the MSS. in the treasury. Thus, some loose pages of a Greek Bible which they show do not belong, as they assert, to the Codex Sinaiticus. A complete catalogue of the library by Prof. Gardthausen of Leipsic was published at Oxford in 1886.

The so-called Evangelium Theodosianum, a collection of passages from the New Testament, is described without any ground whatever as a gift of the Emp. Theodosius ( 66 A.D.), and in all likelihood does not date farther back than 1000 A.D. It is written on white parchment, both sides of each sheet having two columns in golden characters. A kind of frontispiece is formed by a series of elaborate miniatures of Jesus, Mary, the four Evangelists, and St. Peter. The Psalterianum Cassianum, containing the whole of the Psalms written in microscopical characters on six leaves, was not executed by a nun of the 9 th cent., named Cassia, but is a piece of laborious trifling dating from the period of the Renaissance. - In the 'Small Library' is a copy of the famous Codex Sinaiticus, discovered by Prof. Tischendorf, printed most carefully from the original, and presented by the Emperor of Russia. Several leaves of the precious MS. are preserved at the university of Leipsic, under the name of the 'Codex Fride-rico-Augustanus', but the greater part of it is at St. Petersburg, having been purchased from the monastery by Alexander II. for a large sum. The codex contains a complete copy of the New Testament, most of the books of the Old Testament, a part of the 'Shepherd of Hermas', and the 'Epistle of St. Barnabas'. The great value of the Codex Sinaiticus is due to its completeness, the care with which it is written, the consistency of the peculiarities of its text, and, above all, its great antiquity. lt is pretty well ascertained to date from about $400 \mathrm{~A} . \mathrm{D}$., and is surpassed by the celebrated Codex Vaticanus alone in age and in importance in determining the Biblical text.

On the N. side of the monastery is the Burial Place of the monks, reached by several dark passages, and consisting of a strongly vaulted crypt. The remains of the bishops are preserved in coffins, and those of the priests in a separate part of the vault, while the bones and skulls of the monks are merely piled up together. The skeletons of several highly revered hermits are suspended from the wall. At the gate of the priests' vault is placed the skeleton of St. Stephanos (d. 580), wearing a skull-cap of violet velvet. Not far from this vault is a well, and beyond it is the rarely used burialground for pilgrims who have died here.

A flight of steps descends from this court to the *Garden, the trees of which blossom most luxuriantly in March and April, presenting a grateful sight in the midst of this rocky wilderness. It is laid out in the form of terraces, and contains peach-trees, orange-trees, vines, etc., overshadowed by some lofty cypresses.
lnto the wall of the monastery facing the garden are built two fragments of marble 'bearing inscriptions, Gne in Greek, and one in Arabic (published by Lepsius). The longer, in Arabic, runs as folluws: - The monastery of Mt. (TYur) Sinai, and the church of the Mountain of the Con-
versation, was built by Justianus (i.e. Justinianus), the pious king of the Greek confession, dependent on the aid of God, and waiting for the promise of his Lord, to remind himself and his wife Theodora of the flight of time, in order that God might inherit the earth and everyone thereon, for he is the best of heirs. And his building was ended after thirty years of his reign; and he appointed over it a superintendant named Dhulas. And this happened in the year 6021 after Adam, which corresponds with the year 527 of the year of the Lord Christ'. It appears from the style of the characters, that the inscriptions date from the 12th or 13th cent., and it has already been mentioned, that the date of the foundation of the monastery has been confounded with that of the castle built by Justinian.

## The Jebel Músa and Râs eṣ-Ṣaf̣̣àf.

The ascent of the Jebel Mûsa occupies 3 hrs ., and presents no difficulty. The start should he made about $5 \mathrm{a} . \mathrm{m}$. or earlier. Two different paths lead to the top. The more interesting, but also more fatiguing, ascends the old pilgrimage-steps (see helow) and leads up the Wâdi Shu'aib by an unfinished road begun by (Abbâs Pasha ( p .260 ). Those who remain long enongh on the Jehel Mûsa to enjoy the magnificent spectacle of a sunset must start immediately atter the disappearance of the sun and walk rapidly, so as to have time and light enough to descend to the cypress plain (Chapel of Elijah), whence, with the aid of a guide, they may reach the monastery in an hour without difficulty, even in the dark, hy following the road of 'Abhâs Pasha. The pilgrims' steps should on no acconnt be descended at night. If necessary the night may be spent in the chapel of Elijah, in which case the monks provide blankets.

Those who ascend by the pilgrims' steps quit the monastery by a small side-gate in its $W$. wall, and mount the bare granite of the W. side of the Shu'aib valley, by a path which gradually becomes steeper, but is unattended with danger. This path, which, like many of the Oriental churches, is said to date from the time of the Empress Helena, was probably constructed for the pilgrims in the 6 th or 7 th cent. In 20 min . we reach a small spring which contains the same quantity of water in winter and summer, and where, according to the Arabs, Moses once tended the sheep of Jethro, whom they call Shu'aib. The monks, on the other hand, declare that it issued from the rock in consequence of the prayers of the holy abbot Sangarius, when the wells in the monastery dried up, and that it is a cure for diseases of the eye. In 12 min . more we come to a hut, styled the Chapel of Mary, which is said to have been erected in memory of a vision of the Virgin. The monks, according to the story, were so terribly plagued with vermin, that they determined to leave the monastery, and ascended the mountain in procession, intending to quit the holy places. On the way, however, on the site of this hut, the Virgin appeared to them, promised to deliver them from their tormentors, and commanded them to return. They obeyed, and found that all the vermin had disappeared. The traveller, however, at a late period of the year, will have abundant opportunity of observing that the foe has since returned. - Farther up, the route crosses a small ravine, and then passes through two rude gates. Monks are said formerly to have been stationed here for the purpose of receiving from the pilgrims, who wished to take
the sacrament on the top of Mt. Sinai, a certifleate that they had attended the confessional in the monastery. At the first gate they were handed a receipt, which they gave up at the second. After a few minutes more we reach a pleasaut green plain, called the 'plain of the Cypress', after a gigantic cypress which rises in the middle of it. It is enclosed by bold and barren masses of rock, and reddishbrown and grey pinnacles of hard granite. Exactly to the S. of the cypress rises the peak of the Jebel Mûsa; farther distant, to the S.W., towers the lofty Jebel Katherîn (p. 270), and to the N. is the cliff of the Șaf̣̣̂̂f rising from the Râha plain. On a plateau to the right of the path is a nursery of saplings by the side of a fresh spring. We turn to the left of the cypress, and mount the rugged blocks over which lies the route to the summit of the Jebel Mûsa. On a small eminence, which unites the cypress plain with the Jebel Mûsa, on the left of the path, is a simple white stone building, containing two chapels dedicated to the prophets Elijah and Elisha. The rudely-whitewashed interior contains a hollow which the monks point out as the cavern in which Elijah concealed himself after he had slain the priests of Baal on the brook Kishon and had wandered 40 days and 40 nights in the wilderness. Jehovah commanded him to ascend to the top of the mouutain (pp. 236, 237).
'And behold', we read in 1 Kings xix. 11, et seq., 'the Lord passed by, and a great and strong wind rent the mountains, and brake in pieces the rocks before the Lord, but the Lord was not in the wind: and after the wind an earthquake, but the Lord was not in the earthquake: 12. And after the earthquake a fire, but the Lord was not in the fire: and after the fire a still small voice. 13. And it was so, when Elijah heard it, that he wrapped his face in his mantle, and went out, and stood in the entering in of the cave. And, behold, there came a voice unto him, and said, What doest thou here, Elijah?' - We may remind the reader how effectively Mendelssohn has set this sublime passage to music.

Beyond the Chapel of Elijah ( 6900 ft .) the route, or rather the flight of steps ( 3000 in all, according to Pococke; 500 to the spring of Sangarius, 1000 to the Chapel of Mary, 500 to the chapel of Elijah, and 1000 to the top) becomes steeper, but by daylight it is nowhere attended with danger. The granite is at first speckled red, afterwards grey, green, and yellow. After all ascent of 40 min . more, a natural hollow in the granite is pointed out by the Arabs (to the left of the path) as a foot-print of the camel which the prophet rode on his visit to Sinai, before his call. According to another legend, the camel is said to have stood with one foot in Damascus, another in Cairo, the third in Mecca, and the fourth on Mt. Sinai, where the impression is still to be seen, and thence to have been carried up into heaven with his rider by the angel Gabriel. In $3 / 4 \mathrm{hr}$. more we reach the summit of the Jebel Masa ( 7363 ft .), which rises 2350 ft . above the monastery. On the small plateau at the top, to the left, partly built on ancient foundations, is situated a small and simple chapel,
which those of the guides who are monks enter with candles and incense. On the right rises a small mosque in bad preservation, which the Arabs revere highly, and which, until recently, they were only permitted to enter clothed in the ihrâm, or single, plain garment wlich they wear when pilgrims at Mecca. After the Ṣalih festival (p. 276) in the Esh-Shêkh valley the Beduins sacrifice animals to Mûsa (Moses) here. At the N.E. angle of the rock which bears the chapel there is a hollow, where Moses is said to have stood when 'the Lord's glory passed by', and the monks show the impression of the prophet's head and shoulders on the stone. The tradition is to the effect that Moses remained fasting for forty days in a hollow resembling a cistern near the mosque, while writing the ten commandments.

The view is wild and imposing. Towards the S.W. rise the sombre and majestic Jebel Zebîr and Jebel Katherîn, the highest mountains in the peninsula. To the S.E. we survey the Sebà' îyeh Valley (p.271). Above it rises a multitude of mountain chains and peaks, picturesquely interspersed with deep wâdis. Towards the E. the Jebel el-Me'allawi is particularly conspicuous. In clear weather the Red Sea, and even the greater part of the Bay of 'Akaba, are visible. The island of Tîràn to the S.E. of the peninsula is also sometimes descried. Towards the N.W. is the Ràs es-Safsâf, while below us lie the valleys of the two monasteries. Beyond these, on the right, framing the picture, rise the Jebel 'Arìbeh, El-Ferîc, and Es-Şannà'; on the left, the Jebel er-Rabba and Ez-Zafarîyeh, with the château of 'Abbàs Pasha. Towards the N., beyoud the Ràs ese-Şaf̣̣àf, we obtain a glimpse through the defile of the Nakb el-Hawi of the less mountainous region of the peninsula in that direction.

We descend in 20 min . to the cypress plain, whence the guides conduct us in $3 / 4 \mathrm{hr}$. through two fertile hollows by a slightly descending path to a third valley, picturesquely commanded by rocks. The first dale contains the remains of a cistern and a chapel dedicated to John the Baptist. From the valley in which this path terminates, it is usual to make the ascent of the Ras eṣ-Ṣafsáf ('mountain of the willow'), which many authorities, particularly since the time of Dr. Robinson, who is also followed by Prof. Palmer, identify with the mountain where the commandments were givell. We may here enjoy a cool draught from a spring near a dilapidated chapel dedicated to the 'Sacred Girdle of the Virgin Mary', and inspect the venerable willow which gives its name to the mountain, and from which Moses is said to have cut his miraculous rod. The monks formerly pointed out another bush in the monastery garden from which the rod was cut. The ascent of the Șafṣâf ( 6540 ft .) is at first facilitated by steps. Farther up the path becomes steeper, and the extreme summit can only be attained by persons with steady heads by dint of scrambling. Those who
are not disposed for this undertaking should take their stand by the opening of a chasm which descends precipitously into the Wâdi erRâha, situated about 50 paces below the summit of the mountain.

To the N., on the other side of the valley, rise the red porphyry masses of the Jebel Fréa, forming the nuclens of a labyrinth of other mountains extending towards the N. The S. side of it is called the Jebel Sona, to which belong the granite slopes commanding the Wâdi er-Râha at the traveller's feet and the Wâdi ed-Dêr. On the right (E.) rises the Jebel ed-Dề, and on the left (W.) are seen nomerons cliffs of granite, including the narrow Ughret el-Mehd at the entrance of the Wadi el-Leja, and the Jebel el-Ghabsheh. Far below us in the valley, at the mouth of the ravine above which we stand, rises a mound of sand with some ruined buildings and a few fruit-trees.

Those who wish to return hence to the monastery may descend by the ravine called the Sikket Shucaib. The route is diffcult.

A direct route from the monastery to the top of the Râs eṣ-Safṣâf (guide indispensable) ascends through a cleft immediately behind the monastery, a little to the $\mathbf{W}$. of the pilgrims' steps. There are steps here also, but the route is not recommended to those who are inclined to dizziness, and it is much more fatiguing than the pilgrims' route. The descent may be made by a cleft opening into the Râha plain, but this route is also very rough, and cannot be recommended for the ascent. Huge masses of rock have fallen into the cleft, and the path often leads below them.

Those who desire to compare the form of the groap of Mt. Sinai with the accoant given of the 'Mount of the Lord' in the Bible narrative should keep in mind the following points suggested by $\mathrm{Dr}_{\text {r }}$. Robinson, which may also be considered in reference to Mt. Sinai. There mast be the summit of a monntain commanding the camp of the people, and a space contignous to the mountain from which a large maltitude could witness the scene on the heights. The camping-place must be so situated with regard to the mountain, that the people could approach the latter, and stand upon its lower slopes; there mast be the possibility of toaching the mountain, and of placing an enclosure roand it to prevent the people from ascending it, or touching its extremity.

## The Wadi el-Leja and the Arbarin Monastery.

This excursion, which presents no difficulties, takes 4 hrs . It may be made on horseback and without a gaide. The Arbarin Monastery lies on the route to the Jebel Katherîn.

Numerous sacred spots are passed on the route. Before entering the valley from the Râha plain, the place is shown where the earth is supposed to have swallowed up the company of Korah, although, according to the Bible narrative, the scene of that event must have been at a considerable distance from Mt. Sinai. A hole in the rock is also pointed out as the mould of the golden calf.

The Leja Valley, which flanks the $W$. side of the Jebel Mûsa, owes its name to an Arabian tradition that Leja was a daughter of Jethro, and a sister of Zipporah (Arabic Zafûrîya). At the entrance we first observe, on the right, the dilapidated hermitages dedicated to SS. Cosmas and Damianus, and a disused chapel of the Twelve Apostles. On the left is the ruinous monastery of El-Bustân with a few plantations; farther on we come to a mass
of rock, called by the Arabs Hajer Musa, or 'Stone of Moses', and declared by the monks to be the Rock of Horeb, from which the spring issued when struck by Moses. It is probably in accordance with an aucient Jewish tradition, with which both St. Paul (1 Cor. x. 4), and the expounders of the Korân seem to have been familiar, that the monks assure us that this rock accompanied the Jews throughout their wanderings in the desert, and then returned to its old place. It is of reddish-brown granite, measures about 130 cubic yds. in content, and is about 12 ft . high. The S . side is bisected somewhat obliquely by a band of porphyry about 16 in . wide, from holes in which jets of water for each of the 12 tribes are said to have flowed. Two of the holes, however, seem to have disappeared. - Several Sinaitic inscriptions (p. 251) are to be seen here.

About 20 min . to the S . of this point is the unpretending Dêr el-Arba'in, or Monastery of the Forty (i.e. martyrs), with an extensive garden containing olive and other trees. In the upper and rocky part of the site rises a spring with a grotto near it, which is said once to have been occupied by St. Onofrius. The monastery was inhabited from the 16 th down to the middle of the 17 th century. Two or three monks reside here occasionally to look after the garden. The forty martyrs, from whom the monastery derives its name, are said to have been monks who were slain by the Saracens, but that event may as probably have taken place at the monastery of Ṣikelyîh on Mt. Serbầl (p. 256).

## The Jebel Katherin.

The ascent of the Jebel Katherin is more difficult than that of the Jebel Mûsa, and is hardly suitable for ladies. The start should be made very early, or the previous night should be spent at the Arbarin monastery (see above). See map, p. 256.

Route as far as the ( 2 hrs .) Dêr el-Arbaîn, see above. We then follow a gorge to the $S$. W., which soon contracts considerably, and observe several Sinaitic inscriptions. After $11 / 4-11 / 2 \mathrm{hr}$. we reach the Bîr esh-Shunnâr, or 'partridges' well', which God is said to have called fortl for behoof of the partridges which followed the corpse of St. Catharine (see p. 271) when borne to Mt. Sinai by angels. The route now inclines more to the $W$., and is very steep and fatiguing until ( $11 / 2 \mathrm{hr}$.) we reach the ridge of rocks leading to the top. The pilgrims have indicated the direction of the path by heaping up small pyramids of stones on larger masses of rock. After another hour of laborious climbing we reach the summit. The Jebel Katherin has three peaks, the Jebel Katherîn, the Jebel Zebîr, and the Jebel $A b u$ Rumêl, the first of which, according to the most recent and careful English measurements, is the highest ( 8537 ft .), being the loftiest mountain in the peninsula. The air is often bitterly cold here, and snow lies in the rocky clefts till summer. Half of the narrow plateau on the summit is occupied by a small and rudely constructed chapel. The unevenness of the floor is
declared by the monks to be due to miraculous impression of the body of St. Catharine (p. 264), which was found here 300, or according to others, 500 years after her execution, and to which attention was attracted by the rays of light emanating from it. The view is magnificent in fine weather, but towards the S.W. it is intercepted by the Jebel Umm Shomar. Towards the S.E. lies the broad Wâdj Naṣb. The greater part of the Gulf of 'Akaba, the Arabian mountains, and even sometimes the Râs Mohammed (to the S.) are visible. The Gulf of Suez is surveyed as far as the African coast, on which rises the conspicuous Jebel Ghârib (p. 272). On the W. coast of the peninsula lies the sterile plain of El-Kâ'a, which terminates near Ṭ̂r. To the N. tower Mt. Serbâl and the Jebel el-Benatt, and farther distant lie the light-coloured sandy plain of Er-Ramleh and the long range of the Tîh hills.

The Wadi Seba'iyeh (afternoon excursion of 3 hrs .) is interesting from its being regarded by Laborde, Strauss, Tischendorf, Graul, and others, as the camping-place of the Jews. We ascend the Wâdi Shuraib (p. 259), cross the moderate height of the Jebel Mundja ('Mountain of the Conversation'), and enter the rocky Wadi Sebariyeh, which is filled with heaps of rocks and small stones, whence the rocky Jebel Mûsa presents a similar appearance to that of the Râs es-Şaf̣̂âf from the Er-Râha plain. We may now return by the Wadi es-Sadad, a valley farther to ihe N.E., from the Wâdi Sebâ'iyeh into the Wâdi esh-Shêkh, and thence by a longer and easier route through the Wâdi ed-Dêr. On reaching the Wâdi esh-Shêkh (p. 275) we keep to the left until the entrance of the Shuaib valley and the monastery comes in sight.

To reach the Jebel Umm Shomar ('mother of fennel', 8448 ft .) we quit MIt. Sinai by the Wâdi Sebâ'iyeh, enter the broad Wadi Rahabeh, and pass the night at the Wadi Zêtun. Next morning we first ascend the Jebel $A b u$ Shejer rising 1180 ft . above the valley. The Wadi Zerakiyeh, on the right, contains the scanty ruins of the old monastery of Mar Antus. The majestic granite masses of the Jebel Umm Shomar, with its huge pinnacles, somewhat resemble Nt. Serbâl.

## 3. From Suez by sea to Tûr, and thence to Mt. Sinai.

5-6 Days. - The first 3 Days are occupied by the sea-voyage from Suez to Tûr ( $15-20 \mathrm{hrs}$.), by preparations for the journey in Ṭ̂̂r, and by a visit to the Jebel Nakals (p. 273), which last, under farourable circumstances, may be managed on the second day. TTôr is now the quarantine station for the Mecca pilgrims and is consequently called at by the steamers, which may be used for the journey to this point and back. This considerably decreases the trouble and expense of the expedition, but it is necessary to find out beforehand the season and duration of the quarantine, which of course varies with the lunar year of the Arabs and with the state of health of the pilgrims. - On the next 2 or 3 days we proceed viâ the Wadi es-Slêh (p. 273), or more conveniently viâ the Wdai Bebran (p. 274; 9 hrs.), and then vià the Wadi Seldf (p. 258; 10 hrs .) and the Wadi er-Raha (p. 258), to the Sinai Monastery (p. 259).

A vessel of 20 tons' burden, with a crew of four men, may be hired for the trip from Suez to Tûr for about $\mathscr{E}$. 5. The master of the vessel should be required to provide himself with the necessary ship's documents. The traveller's consul will perhaps give him a letter of introduction to Shekh Hernen, a respectable and obliging Arab who lives at Tưr, or to the Russian Vice-Consul there, who will assist him in getting camels. Travellers who can speak modern Greek or Arabic should go direct to the Greek Convent, show the monks the letier of introduction to the convent rn Mt. Sinai, and hire from them the camels necessary for
the completion of their journey. Camels are always to be had at Tûr, but, as good saddles are rare, the traveller's dragoman should take an ample supply of rugs from Cairo. If the party is numerous, or if the traveller wishes to provide against the possibility of delay, camels should be sent on from Suez to Tûr, a journey of three days for unladen animals, the cost of which is not very great.

Sba Voyage to Ṭ̂́r. - The most favourable time for starting from Suez (p. 195) is towards evening. After traversing the narrow arm of the sea at the upper end of which Suez is situated, we reach the end of the Suez canal, and the roadstead shortly afterwards. On the right rise the 'Atâka mountains (p. 196), with the promontory of the same name, and to the left are the palms of 'Ain Mûsa (p. 198), beyond which is the low chain of the hills of Tîh. Beyond Cape 'Atâka opens the broad Wâdi Mûsa, and the hills recede. On the left lies the desert extending between the Tîh hills and the sea; to the right, in the foreground, is the lighthouse of Râs Zafferâneh, opposite to which, on the left, is the Jebel Hammâm Far ûn (see p. 245), abutting on the sea. For some distance hills on the left now rise close to the coast (see p. 246). The bay expands. To the right, in the foreground, rises the huge and picturesque Jebel Ghârib (about 5900 ft . in height), at the foot of which is a second lighthouse. On the left are the conical peaks of the Jebel el-'Araba, the base of which we now skirt. Beyond the Jebel Ghârib, which becomes more and more prominent, rises the table-land of Jebel ezZêt, which yields petroleum. The chain of Jebel el-'Araba is prolonged by the sandy Jebel Nâkûs (p. 273), and the Jebel Hammîm Mûsa (see below). We at length come in sight of the palm-groves and buildings of T T ur, beyond which lies the sterile desert of $E l-K \widehat{a}^{〔} a$ (p. 274); above the latter tower the imposing mountains of Serbâl on the left, and of Umm Shômar on the right, between which appear the mountains of Sinai.

Tar (accommodation at the house of Hr. A. Kaiser, a Swiss naturalist) affords the only good anchorage iu the Gulf of Suez, beside Suez itself. The harbour (entirely natural) is admirably protected by coral reefs, which, however, are dangerous to those unacqainted with their situation. Tûr is the chief quarantine station of the Mecca pilgrims. As the desert air here comes into contact with the fresh sea-breezes and as there is abundance of drinkingwater, the choice seems a very judicious one. On the return of the pilgrims, the desert to the S. of Ṭ̂r presents a scene of great animation. Long rows of tents, arranged in six groups, afford ample accommodation for the largest concourse of pilgrims, while the throng is swelled by traders from Suez and Cairo, who sell their inferior wares at the most exorbitant prices. On the side next Tûr is the camp of the soldiers who maintain the quarantine. Exceilent fish, numerous shells, and interesting marine animals abound here.

To the N. of the town the Jebel Hammâm Sidna Mûsa ('Mountain of the baths of our Lord Moses'; 375 ft .), a spur of the low
range of coast-hills, projects into the sea. At the foot of this hill lie sulphur-springs of the temperature of $92-94^{\circ}$, roofed over by 'Abbâs Pasha, which irrigate plantations of palms, and are used by the natives chiefly as a cure for rheumatism. The Kal'at et-Turr, a castle erected by Sultân Murâd, is in a dilapidated condition. Most of the palm-plantations belong to the monks of Mt. Sinai, and are managed by their servants. The Greek Convent at Ṭur, which is connected with the Sinai Monastery, is modern and uninteresting. A few monks are always stationed here, officiating partly as chaplains to a few Christian residents, and partly as caterers for the Sinaitic monastery, which is supplied with provisions and fish from Ṭ̂̂r. The caravans between the sea and the monastery are conducted by the Beduins of the convent.

Excursions. The palm-garden of $E l$-Wadi, about a mile to the N.W. of the town, is noted for its salnbrity. In the limestone slopes of the Jebel Hammam Masa are numerous dilapidated hermitages, with Christian crosses, and several Greek and Armenian inscriptions, dating from A.D. 633. To the N. rises the Jebel Mokatteb, which boasts of several Sinaitic inscriptions. None of these places present much attraction.

The Jebel Nâkûs, or 'Bell Mountain', is $41 / 2 \mathrm{hrs}$. distant from Tûr. It rises amphitheatrically abont 1 M . from the shore of the Red Sea, and is the scene of a phenomenon which was first observed by Seetzen. On ascending the sand which covers its slope we hear a peculiar sonnd, resembling that of distant bells, which gradually increases until it terminates in a strange kind of roar. The phenomenon is easily explained : in ascending over the sand, when $d r y$ (in which case alone the sonnd is heard) the traveller loosens it and causes it to fall into the clefts of the sandstone rock on which it lies; a slight and gradually increasing sound is thus prodnced by this miniature avalanche. The Arabs believe that these curious sonnds proceed from a monastery bnried under the sand. It had been accidentally discovered by an Arab, who received hospitable entertainment from the monks, and swore not to betray its existence; bnt when he afterwards broke his oath, the monastery vanished.

From Tûr to Mt. Sinai there are two routes, one through the Wâdi Hebrân, the other through the Wâdi es-Slêh (Islêh). The latter is the shorter and preferable route.
(1) Throvgh the Wâdi ms-Slìn. The start should be made at a very early hour, in order that the desert $E l-K \hat{a} \hat{a}^{\prime} a$ may be crossed before the heat of the day. We ride due $\mathbf{E}$. for 6 hrs . through the gradually ascending desert in the direction of the huge Umm Shomar ( p .271 ). On reaching the base of the mountain, we descend very rapidly into a basin resembling the bed of a lake, which has been formed by the mountain torrent issuing from the Wâdi es-Slêh. At the bottom of this basin we enter the narrow, rocky defile of the Wadi es-Slêh, one of the most romantic ravines in the whole peninsula. After ascending this gorge with its turbulent brook for half-an-hour, we reach a charming resting-place where there is excellent water. The brook, which of course varies greatly in volume at different seasons, sometimes disappears altogether in the upper parts of the valley, but there is water enough everywhere to support the vegetation, which is very luxuriant at places. Palms and numerous tamarisks thrive in the
lower part of the valley. The route is not always practicable for riding, but if the rider dismounts, the camels contrive to thread their way through the most difficult part of the ravine, while the traveller will find it a relief to walk for a quarter-of-an-hour. A little above the resting-place large masses of rock compel us again to dismount for half-an-hour's walk. About 2 hrs. from the entrance of the valley, and 280 ft . above that point, the route divides, and we turn to the left. At the next bifurcation, 10 min . farther, our route leads to the right. We enter a rocky gorge which soon contracts to a defile of 12 ft . only in width, then expands, and again contracts. We pass a few palm-trees, many tamarisks, Solanex, and thickets of reed. At the next bifurcation ( 1 hr .) we turn to the right. We pass ( 20 min .) the precipitous bed of a torrent on the right, and then a second descending from a curious looking hill crowned with a huge mass of rock. The stony channel of an old torrent here is deeply furrowed by that of another watercourse which now crosses it. The valley becomes wilder and more barren. We ascend the Wâdi Tarfa for $5-6 \mathrm{hrs}$. to a height of about 1875 ft . We then enter the broad Wâdi Rahabeh, and traverse an open and undulating basin for 6 hrs . more, first towards the N.E. and then towards the N.W., and at length reach the Wâdi Sebâ'̂̂yeh, at the S.E. base of the Jebel Mûsa, recognisable by its church and monastery. (Towards the N. the Wâdi Sebâ̂îyeh is connected with the Wâdi esh-Shêkh by the Wâdi Sadad; comp. p. 275.) A saddle of moderate height separates the Wâdi Sebâ'îyeh from the Wâdi ed-Dêr ('valley of the monastery'). To the left, on the precipitous Jebel Mûsa, which is quite perpendicular at the top, we perceive the zigzags of the road constructed by 'Abbâs Pasha (p. 266). We at length descend the narrow Wàdi ed-Dêr (Shu'aib), and reach the monastery (see p. 259).
(2) Throvgh the Wâdi Hibrần. 1st Day. For one hour we ascend a gradual slope with a saline soil to the $C m m S a^{C} a d$, where a spring of fresh water affords support to a few families. The waterskins should be filled here, and a supply of dates purchased, as the desert of $E l-K \hat{a} \cdot a, 6 \mathrm{hrs}$. in width, has now to be traversed. We follow the road of 'Abbâs Pasha ( $\mathbf{p}$. 266), which, though sometimes covered with sand on the low ground, is always sufficiently marked to indicate the direction to the Wâdi Hebrân. For the first hour or two we pass a number of dûm-palms, but these also at length disappear. A single seyâl-tree stands about halfway, but otherwise we are surrounded by the hot desert, which is at first covered with fine sand, afterwards with rubble, and at length with enormous blocks of stone in the vicinity of the precipitous mountains. The Wadi Hebrann is reached about sunset. At the point where it issues from the mountains it is a deep and very narrow rocky ravine. A rocky recess close to the entrance affords quarters for the first night.

2nd Day. The route through the Wâdi Hebrân winds consider-
ably; the formation is granite, in which syenite predominates; it contains thick veins of hornblende, slate, geenstone, and various kinds of basalt. The volume of the brook varies according to the season; its banks are bordered with vegetation. The path, which is comparatively good, and passes a number of Sinaitic inscriptions, was to have been converted into a carriage-road by 'Abbâs Pasha, but his plan was never carried out. After $13 / 4 \mathrm{hr}$. the valley divides, and the road of 'Abbâs Pasha leads to the N. At a second bifurcation ( $3 / 4 \mathrm{hr}$.) the valley expands, and in $1 / 2 \mathrm{hr}$. more we reach a clear and abundant spring, but disagreeably warm. The țarfa bushes and palms here form an impenetrable thicket. Water now disappears ( 10 min .), the vegetation becomes scantier, and we proceed to cross the precipitous Nakb el-'Ejjâwi ( 3290 ft.). Our quarters for the second night are near the Wâdi Selâf (p. 258), beyond which we reach the route from Suez to Mt. Sinai, described at pp. 241, 242. On the third day we arrive at the Monastery of St. Catharine (p. 259).

## 4. Return Route from the Monastery of Sinai to Suez vià the Wadi esh-Shêkh and Sarbtat el-Khảdem.

5-7 Dars. - 1st Day. From the Monastery of Sinai to the Wadi et-Tarr (p.276), in the Wâdi esh-Shêkh, $73 / 4 \mathrm{hrs}$. (to El-Watîyeh, $33 / 4 \mathrm{hrs}$.; thence to the Wâdi et-Tarr, 4 hrs.). - 2nd Day. From Wâdi ett-Tarr, viâ Wâdi Solêf, Wâdi Berâh, and Wâdi Lebweh, to the lower end of the Wadi Barak (p. 277), $83 / 4 \mathrm{hrs}$. (to the top of the Nakb Wâdi Barak, $61 / 2 \mathrm{hrs}$; thence to the lower end of Wâdi Barak, $2^{1 / 4} \mathrm{hrs}$.). - 3rd Day. From the lower end of the Wâdi Barak to the beginning of the Wädi el-Homr (p. 279), $91 / 4 \mathrm{hrs}$. (to the Wâdi Merattameh in the Wầdi Sûwik ( p .277 ), $41 / 4 \mathrm{hrs}$.; thence to the Wâdi el-Homr, 5 hrs.). - 4th Day. Through the Wâdi elHomr to the Wadi Gharandel (p. 244), 91/4 hrs. (to the Wâdi Shebêkeh, $33 / 4 \mathrm{hrs}$.; thence to the Wâdi Gharandel, $51 / 2 \mathrm{hrs}$.). - 5th Day. From the Wâdi Gharandel to the Wàdi Werdan (p. 242), $73 / 4$ hrs. - 6th Day. From the Wâdi Werdân to 'Ain Mûsa (p.198), 8 hrs. - 7th Day. From 'Ain Mûsa to Suez (p. 195), 21/2 hrs.

Those who desire to visit the monuments of Sarbat el-Khadem (p.277) should go on the 3rd day as far as the Wâdi Merattameh (see above), and devote the afternoon to the antiquities. They would then proceed on the 4 th day as far as the junction of the Wâdi el-Homr and the Wâdi Shebêkeh ( $83 / 4 \mathrm{hrs}$.).

On starting from the monastery, we first turn to the N.W. in the Wâdi ed-Dêr (p. 259), leave the plain of Er-Râha (p. 258) to the left, and turn to the N.E. into the Wâdi esh-Shêkh, which is joined by the Wâdi es-Sadad (p. 274) on the S., 1 hr . farther on. On the right rises the Jebel ed-Dêr, or 'Mountain of the Monastery' (p. 259), and on the left the Jebel Sona (p. 269), both of which are barren and precipitous. On the left, farther on, is the Jebel Khizamîyeh. The broad Wadi esh-Shêkh, which is inhabited at places, extends in a large semicircle of about 15 hours' journey from the Jebel Mûsa to wards the N. W. down to the Wâdi Fîrân (p. 251), presenting on the whole but little attraction. After $11 / 4 \mathrm{hr}$. more we observe the Tomb of the Shêkh Ṣ̂alih (Nebi Ṣ̂̀lih), which is highly revered by
the Beduins, and from which the valley derives its name. Like all these weli's ( $\mathbf{p}$. cxcvii), the monument is an insignificant cubical building, whitewashed, and covered with a dome, and contains an empty sarcophagus. The interior contains votive offerings, such as tassels, shawls, ostriches' eggs, camels' halters, and bridles. The Tawâra Beduins regard Shêkh Ṣalîh as their ancestor; he was probably, however, an early Mohammedan prophet celebrated for his eloquence, who is extolled in the Korân as one of the most venerable of the patriarchs. He is said to have called forth a living camel out of the rocks, and to have destroyed by an earthquake some of the proud Thamudites, to whom he had been sent, for their unbelief and for their wickedness in mutilating the knees of the sacred camel. Every May a great festival takes place here, accompanied with sacrifices, feasting, and games, at which women also are present, and a smaller festival takes place after the date harvest. At the close of the proceedings the children of the desert ascend the Jebel Mûsa, and there offer sacrifices to Moses (p. 268).

To the W. of the tomb a hill, bearing a few ruins, rises from the valley. We next pass ( $1 / 4 \mathrm{hr}$.) the entrance to the Wâdi $\boldsymbol{S u w e ̂ r i ̀ y e h ~}$ on the right, which is traversed by the route to 'Akaba (p. 280). Opposite us, to the left, are several small towers, above which rises the pointed Jebel Ferî. The valley contracts, but after $1 / 2 \mathrm{hr}$. expands into a wide basin, bounded oll the N . by a chain of precipitous rocky slopes. Beyond this basin ( 40 min .), and beyond the mouth of the Wâdi Shitb, on the left, the route traverses ( 10 min .) the El-Watiyeh Pass ( 4022 ft .), enclosed by imposing masses of granite. Immediately beyond it rises a stone, resembling an altar, with a white summit, which the Beduins point out as the scene of Abraham's sacrifice. A rock near it, in the form of a chair, is called the Mak'ad Nebi Mûsa, or seat of the prophet Moses, which he is said to have occupied while tending the sheep of his father-in-law Jethro (p. 259).

At this point begins the lower part of the Esh-Shêkh valley. The character of the region becomes less mountainous, and the route enters an undulating district. In less than an hour we reach a luxuriant growth of tarfa shrubs, which extends for a distance of about $1 \frac{1}{2}$ M. (comp. p. 257). Beyond these shrubs, on the left, opens the Wâdi Kasab, which leads to the S. to the Naḳb el-Hâwi (p. 258), and contains a number of palm-trees. Near the ( $11 / 4 \mathrm{hr}$.) Wâdi Maghêrât, which lies to the right, is the valley of Esh-Shêkh, which, according to Prof. Palmer's measurements, lies 3566 ft . above the sea-level. The imposing mass of Mt. Serbâl now becomes visible. Near the ( 1 hr .) Wâdi et-Tarr (right) are a few inscriptions (p. 251). The next valley on the right is the ( 35 min .) Wâdi $\underset{S}{ }$ olêf; and opposite to it opens the broad Wâdi Sahab, through which the Naḳb el-Hâwi (p. 258) may be reached in 5 hrs. At this point ( 2856 ft .) our route quits the Wâdi Esh-Shêkh, which leads to the
( $23 / 4 \mathrm{hrs}$.) deflle of El-Buwêb (p. 257) farther S. We ascend rapidly to the N.W. in the western part of the Wâdi Şolêf, which soon contracts to a gorge. Several valleys are now crossed, particularly the Wâdi el-Akhdar and the Wâdi el-‘Ishsh, as well as the low ranges of hills which separate them; and in $13 / 4 \mathrm{hr}$. we reach the long Waddi Berah, lying at the base of the Jebel of the same name. We now ascend this valley, obtaining at first a fine retrospect of the Sinai group, the Jebel Mûsa, and the Katherîn, and reach the top of the pass at the base of the pyramidal hill of Zibb el-Bahêr Abû Baharîyeh ( 3895 ft .). We next enter the broad Wâdi Lebweh, through which the route, now monotonous and nearly straight, descends in less than 2 hrs . to the foot of the Nalkb Wâdi Baralc. The Wâdi Lebweh, which makes a bend here and descends to the Wâdi Fîrân, now takes the name of Wâdi el-'Akir. Our route ascends in $1 / 2 \mathrm{hr}$. to the top of the Nakb Wâdi Barak Pass, beyond which begins the Wadi Barak, a wild, stone-besprinkled valley, sometimes contracting to a gorge, and overgrown with remarkably fine old seyâl trees. Near the head of the valley are several 'Nawâmîs' (stone huts; see p. 258), Sinaitic inscriptions, and large fragments of a rude granite wall, which extends along both slopes of the valley, but there is a wide opening where the route passes through it.

On the right opens the Wâdi Mesakkar, and on the left, lower down, the Wâdi Tayyibeh, at the base of the lofty Dabbûs 'Ilâk. In $21 / 4 \mathrm{hrs}$. more the Wâdi Barak reaches the Wâdi Sîk, which after $3 / 4 \mathrm{hr}$. turns sharply to the left, leading to the Wâdi Sidr, while the Wâdi el-Merayin on the right leads to the Debbet erRamleh. Our route runs to the N.W., gradually ascending, and and in $1 / 2 \mathrm{hr}$. reaches a narrow sandy plain called the Debêbet Shêkh Ahmed, from the tomb of a Beduin chief of that name to the right of the path. We then descend into the Wâdi Khamileh, in which we again ascend to ( 2 hrs. ) the Râs Sûwik ( 2475 ft .). On the left is the picturesque Jebel Gharâbi, a curiously eroded mass of sandstone, with several Sinaitic inscriptions. An extensive view is obtained over the Tîh hills and the plain of Ramleh.

We descend from the pass by a steep zigzag path into the Wâdi Sawik, in which after $1 \frac{1}{2} \mathrm{hr}$. we reach the mouth of the small Wâdi Merattameh, situated at the foot of the hills called Ṣarbut el-Khâdem. On these hills, 690 ft . above the valley, are situated a number of interesting monuments, dating from the period of the Pharaohs, and re-discovered by Niebuhr in 1762. The ascent from the Wâdi Merattameh, which is somewhat fatiguing, and requires a steady head, occupies fully an hour. On the level platean on the top are numerous monuments with hieroglyphic inscriptions. There are traces of an old enclosing wall, 57 yds. long, and 23 yds. broad, surrounded by sixteen ancient Egyptian upright monuments $\square$. Similar stones bearing inscriptions are lying on the ground, and there are the ruins of a small temple. The sanc-
tuary and a pronaos of this edifice were hewn in the rocks in the reign of Amenemha III. (12th Dyn.), and furnished with handsomely painted inscriptions (which, however, are nearly obliterated), and niches for images. In the reign of Tutmes III. (18th Dyn.) the temple was extended towards the $W$. by the erection of a pylon and anterior court, and several rooms on the $W$. side were afterwards added by other kings. As in the Wâdi Maghâra (p. 248), the goddess Hathor, and particularly the Hathor of Mafkat (p. 248), was principally worshipped here. The inscriptions indicate that this spot, instead of being a burial-place with its tombstones, as one would at first have supposed, was a religious edifice with a number of chambers for various purposes.

Khâdem (Khatem) is the ancient Egyptian word for an enclosed space, a fort, or castle; and Şarbût (pl. Serâbîṭ) signifies a hill, or peak, in the language of the Beduins in the peninsula; so that Serâbitt el-Khâdem signifies 'the heights of the fortifled place'. In the neighbourhood copper and mafkat were formerly worked, and the plateau was occupied with smelting furnaces, and a temple where the miners and the overseers assembled to celebrate various festivals. The dwellings of the workmen and their overseers, and the magazines, must have been nearer the mines. Most of the monuments on the plateau were erected by the superior mining officials, who wished to hand down their names and merits to posterity, mentioning the king in whose reign they obtained their appointments, the mineral they worked, the number of miners they employed, the zeal with which they performed their duties, and the accidents which befell them during their term of office. Victories over the native mountain tribes are sometimes also mentioned.

The large heaps of black stone in the vicinity, resemhling the slag from a foundry, are partly of natural form ; but artificially produced slag also occnrs in the valleys hetween Sarbût el-Khâdem and the Wâdi Naṣh. The old mines were re-discovered by Mr. Holland, while others had already been discovered and described by Rüppell in the Wadi Naṣ. It appears from the inscriptions that the mines were first sunk in the reign of Snefru (p.cv) at an early period of the Primæval Monarchy, and that they were worked down to the 20th Dynasty. The cartouche of Ramses IV. is also said to have been found here. The mines of Şarhût el-Khâdem must therefore have been worked after the period of the Exodus, while in those of the Wâdi Maghâra the name of Ramses II., the Pharaoh of the oppression, is the last which occurs in the inscriptions. - A visit to these monuments takes half-a-day. Those who desire to make a thorough inspection, and to visit the Wâdi Naş, will require a whole day. They should then walk from Sarhût al-Khâdem along the hills to the Wadi Naṣ, at the entrance to which are a spring, shaded hy palms, some ruins, the traces of old gardens, and a quantity of slag brought from the mines, $1 / 2 \mathrm{hr}$. to the N.W. - On the hill ahove the mines stands an ancient Egyptian obelisk with half-obliterated hieroglyphics. - Descending the Wâdi Naṣh towards the N. we reach the month of the Wâdi Hobûz ( p .279 ), where the caravan should he ordered to await our arrival.

Beyond the Wadi Merattameh the route continues to follow the Wâdi Sûwik, to the N.W., passing a number of fine seyâl trees of great age. After 1 hr . the valley takes the name of Wâdi $\boldsymbol{H} o b \hat{u} \approx$,
and in less than 1 hr . more it unites with the Wâdi Nassb, which almost immediately joins the Wâdi $B a^{i} b a^{\prime}$, a valley leading to the S.E. to the Hanak el-Lakam (p. 247). At the junction of the Hobûz and Naṣb valleys our route turns to the right, and leads across the sandy table-land of Debbet el-Kerai in 3 hrs . to the beginuing of the Waddi el-Homr. Ascending a little towards the middle of the lofty plain, we enjoy a fine view of the Sarbut elJemel ( 2175 ft .), rising to the W. To the left, in the distance, are picturesquely shaped mountains with flat summits; to the right is the Tîh range; and behind us are the hills of Ṣarbûṭ el-Khâdem, the Jebel Ghârâbi, and the distant Mt. Serbâl.

We now descend to the broad route leading to Nakhleh (p. 280). On the right rises the long Jebel Bêdar. On the ground here we observe a uumber of curious geological formations, consisting of slabs and fragments of sandstone encrusted with modules of iron ore, with a large admixture of silica, grouped like bunches of grapes. Some of these are perfectly spherical.

The Wâdi el-Homr is a broad valley flanked by low limestone hills, and commanded on the N. side by the Sarbatt el-Jemel (see above). From this valley a path, traversing the Wâdi Mesakkar and several other valleys, leads direct to the Wâdi eth-Thâl (p. 246). The regular route follows the Wâdi el-Homr to its union with the Wâdi Shebêkeh (see p. 246). Thence to Suez, see pp. 246-241.

## 5. From Mt. Sinai to 'Akaba and Petra.

9-12 Days. This expedition will be undertaken by scientific travellers only. They should, if possible, be provided with an introduction to the commandant of the fortress at 'Akaba.

The ist day from the monastery of St. Catharine is generally short on acconnt of the late start. - On the 2nd Day the watershed between the Gnlf of Snez and that of 'Akaba is crossed, and the Wadi Sa'l traversed. Beyond the Wadi Marra the ronte is not easily found, until after 2 hrs . we reach a sandy plain extending to the foot of the Jebel et-Tîh. After 4 hrs. we pass the 'Ain el-Khadra, a spring with a few palms, lying to the right, probably the Biblical Hazeroth. After having passed through a narrow defile, we proceed to the N.E. by a sandy path, enter the plain of El-Ghorr, traverse the spars of the Tîh chain, and reach the Wadi Ghazal, with its steep slopes of sandstone. The night is passed in the Wadi er-Ruwêhibîyeh. - 3rd Day. Beyond the wâdi expands a plain of sandstone, varied with granite and diorite. In $21 / 2 \mathrm{hrs}$. We reach the broad Wadi Samghi, quit it ( $13 / 4 \mathrm{hr}$.), turn towards the N.E., and traverse huge masses of rock and slopes by a gradually narrowing path. The narrowest part is called El-Buwêb, 'the little gate'. The path, which now expands and is covered with gravel, gradually approaches the Red Sea, or rather the beautiful, bluish-green Gulf of 'Akaba. In another honr we come to the good spring of $E t$-Terrabin, bordered with palms. The night is spent on the sea-shore. - 4th'Day. The route skirts the shell-strewn shore. The coast mountains are formed of grey granite. Towards noon the spring of Aba Suwêra is reached, and we pitch onr tents near the Wadi Huwêmirat. We observe curious crabs here which take up their abode in empty shells, and walk abont with them on their backs. The hills on the opposite coast of the Bahr "Akaba, or Gulf of 'Akaba, are insignificant. From our quarters for the night the Arabian village of Hakl is visible. - 5th Day. The route leads across
promontories stretching far ont into the sea, a precipitons pass, and then several more promontories, particnlarly near the Wadi Merakh. The territory of the Tâwara terminates here, and that of the Huwêtât Beduins begins. Negociations for a new escort mnst be made with the latter, who are often unreasonable. About 4 hrs. from the Wâdi Hinwêmirât we observe a small island of granite a few hnndred yards from the shore, with two hills bearing the ruins of a castle of the Saracens, probably the Fort Aila, which was unsuccessfully besieged by Rainald of Chatillon in 1182. The island is now called Kureiyeh, Geziret Farcan, or Pharaoh's island. The broad Wâdi Tabbac, farther N., contains a bitter spring and dûm-palms. Dr. Robinson fonnd a sqnare cistern excavated here, lined with red stone. The Ras el-Masri, a promontory of darkcoloured stone, must be ronnded, the mountains recede, and we soon reach the broad Derb el-Hajj, or route of the Mecca pilgrims. We now skirt the extremity of the gulf, cross a saline swamp, leave the rnins of a town on the left, proceed to the S., and at length enter the fortress which lies on the E. bank of the bay.
'Akaba (Kal'at el-‘AKaba). In this neighbourhood lay the Elath of Scripture, which is mentioned on the occasion of the voyages to Ophir, and which was garrisoned during the Roman period by the tenth legion. It was afterwards called Aila, and was still inhabited by Jews as well as Christians at the time of the Crusades. In order to protect themselves against the attacks of the Saracens, the inhabitants pretended to possess a letter of protection from Mohammed. (According to another account they possessed a robe which the prophet is said to have given to John, son of Rubah, the Jewish prince, as a pledge that the Jews might carry on their trade without hindrance.) Down to the 15th cent. the town is spoken of as a large and prosperous commercial place. During the Byzantine period it paid tribute to the emperors, but was afterwards under the protection of the governors and Mohammedan princes of Egypt, and was especially patronised by Ahmed Ibn Tulûn. During the crusades it was taken by the Franks, but in A.D. 1170 Saladin caused boats to be brought by camels from the Mediterranean to the Red Sea, and recaptured Aila. The place, moreover, thongh on the great pilgrimage-route to Mecca, soon decayed, till at last nothing of it remained bnt a fort on the mainland, and one on the island of Kureiyeh. The Turkish fortress of 'Akaba is rectangular in form, each angle of its massive walls being defended by a tower. The entrance, with its iron-clad gate (bearing an old Arabic inscription), is also protected by towers.

Travellers interested in Biblical geography may visit the Wadi Them, as far as the Jebel Barghîr ( $4-5 \mathrm{hrs}$ ). This mountain, which is said to be known to the Arabs as the Jebel en-Nar. ('Mountain of Light'), has been recently supposed by Dr. Beke to be the Mt. Sinai of Scriptnre, on the grounds that the Arabs regard it as sacred, and say that Moses once conversed here with the Lord; that sacrifices were once offered on its summit; and that stones in an upright position, and Sinaitic inscriptions, have been found here.

From 'akaba to Petra. The 'Alawin Arabs at 'Akaba are very exorbitant in their demands, often rude in their manners, and rarely trustworthy. At times the route through their territory to the ancient Rock City is not unattended with danger, and careful enquiry on the subject should be made at Cairo and Suez before starting. An experienced dragoman, and one who is acquainted with the Shêkhs, will be fonnd very useful. From 'Akaba to Petra, by the direct route, is a journey of 3 days, but viâ Nakhieh 4-5 days. From Petra to Hebron, 5-6 days, if nothing untoward occurs. Attractive as Petra itself is, this ronte to it is not more interesting than those leading to Sinai, and the traveller can hardly be recommended to enter Palestine from this direction. A description of Petra, and of the journey to Jerusalem, will be found in Baedeker's Palestine and Syria.

## INDEX.

Besides the names of the places described, this Index also contains a number of names of persons and other words occurring in the Routes and in the Introduction. Ancient names are printed in Italics. The following is a short list of Arabic words of frequent occurrence (comp. vocabulary, p. cevi): -
${ }^{\text {r Ain, }}$, Spring.
$B a b$, Gate.
Bahr, Sea, river (Nile).
Beled, Village. Bêt, House.
Bilàd, Land, District.
Bîr, Cistern.
Birkeh, Pond.
Dêr, Monastery. Derb, Road.

Gami'a, Mosque. Gebel, Mountain. Gezireh, Island. Kafi, Village. Kal'a, Fortress. Kantara, Bridge. Kis $\dot{r}$, Castle. K̇hirbeh, Ruin. Kom, Mound of rubbish. Mêdan, Mídàn, Square,

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Medineh, Town.
Merg, Meadow.
Nakb, Pass.
Nabi, Nebi, Prophet.
Râs, Promontory.
Shârica, Street.
Tell, Hill.
Wadi, Valley.
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10


[^0]:    + In the large work entitled the 'Book of Songs' an endeavonr is made to reduce Arabic music to a system, and the notes are divided into seven different keys, each having the same notes, differently arranged; but the popular songs are sung without the least regard to these artificial rules.

[^1]:    $\dagger$ These syllables represent the coughing caused by the great quautity of smoke inhaled by the hashîsh smoker at intervals of $1 / 4-1 / 2$ hour, after which he gradually becomes intoxicated and inseusible.
    tf The water-pipe out of which the hashîsh is smoked has usually a cocoanut (gozeh) as a receptacle for the water through which the smoke passes.

[^2]:    $\dagger$ The right hand is alone nsed in greeting and as mnch as possible in eating, stroking the beard, and the like, the left hand being reserved for less honourable fnnctions.

[^3]:    + No inference can legitimately be drawn from the fact that the skulls of the ancient and modern Egyptians, which are very similar in form, have no affinity with those which are usually described as of the negro type, as our craniological collections are very incomplete, and our knowledge of the negro races imperfect. The fact is, that several negro races, such as the Nubians and the Shilluk, might be named, whose characteristics undoubtedly belong to the negro type, while their skulls are just as little prognathous as thuse of the Egyptians.

[^4]:    $\dagger$ The total number of Christians in Egypt, including Europeans, Armenians, and syrians, is about 600,000 , or one tenth of the entire population.

[^5]:    + About the year 1865 a kind of uniform called the 'Stambulina' was prescribed by the government for all the officials of the higher classes (black coat with a row of bnttons and low upright collar), but they are allowed to wear ordinary Enropean clothing in their offices. All the officials, however, in the pay of the Egyptian government, including Europeans, and even the members of the mixed court of justice, mnst wear the red fez (tarbûsh).

[^6]:    + It may be noticed here that the air is largely impregnated with saline particles from the limestone rocks of the desert, and it is chiefly to their presence that the beneficial effect of the air on the respiratory organs is supposed to be due.

[^7]:    Baedrier's Egypt I. 3rd Ed.

[^8]:    + Mohammed ('the praised', or 'to be praised') was a scion on the paternal side of the family of Hâshim, a less important branch of the noble family of Kureish, who were settled at Mecca, and were custodians of the Karba. His father 'Abdallah died shortly before his birth (about 570). In his sixth year his mother Amina took him on a journey to Medina, but died on her way home. The boy was then educated by his grandfather 'Abd el-Muttalib, and, after the death of the latter two years later, by his uncle Abu Tâlib. For several years Mohammed tended sheep. He afterwards undertook commercial journeys, at first in company with his uncle, and then, when about twenty-five years of age, in the service of the widow Khadîja, who became his first wife. On one of these journeys he is said to have become acquainted with the Christian monk Bahîra at Boṣra.

    About that period a reaction in the religious life of the Arabs had set in, and when Mohammed was about forty years of age he too was struck with the vanity of idolatry. He suffered from epilepsy, and during his attacks imagined he received revelations from heaven. He can scarcely, therefore, be called an impostor in the ordinary sense. A dream which he had on Mt. Hira, near Mecca, gave him the first impulse, and he soon began with ardent enthusiasm to promulgate monotheism, and to warn his hearers against incnrring the pains of hell. It is uncertain whether Mohammed himself conld read and write. His new doctrine was called Islẩm, or snbjection to God. At first he made converts in his own family only, and the 'Mnslims' were persecuted by the Meccans. Many of them, and at length Mohammed himself (622), accordingly emigrated to Medina, where the new religion made great progress. After the death of Khadîja, Mohammed took several other wives, partly from political motives.

    He now endeavoured to stir up the Meccans, and war broke out in consequence. He was victorious at Bedr, bnt lost the battle of the Uhud. His military campaigns were thenceforth incessant. He obtained great influence over the Beduins, and succeeded in uniting them politically. In 630 the Muslims at length captured the town of Mecca, and the idols in it were destroyed. Mohammed's health, however, had been completely undermined by his unremitting exertions for about twenty-four years; he died on 8 th June, 632, at Medinna, and was interred there.

[^9]:    + Allâh is also the name of God used by the Jews and Christians who speak Arabic.

[^10]:    $\dagger$ Mohammedan Calendar. The Mohammedan era begins with Jaly 16 th (1st Moharrem) of the year 622 A. D., being the day of Mohammed's flight (Hegira) from Mecca to Medina (p. Ixxxiv). The Mohammedan year is parely

[^11]:    lunar and has no reference or relation to the sun; it contains 354 days, or 355 in leap-years, eleven of which occur in each cycle of 30 years. There are 12 months, the first, third, etc., of which have 29 days each, the second, fourth, etc., 30 days; these are named Moharrem, Safar, Rabit elauwel, Rabit el-akhir, Gemad el-auwel, Gemad el-akhir, Regeb, Sharban, Ramadan, Shauwâl, Dhil-ki‘deh, Dhil-higgeh.

    In order approximately to convert a year of our era into one of the Muslim era, subtract 622, divide the remainder by 33 , and add the quotient to the dividend. Conversely, a year of the Mohammedan era is converted into one of the Christian era by dividing it by 33 , subtracting the quotient from it, and adding 622 to the remainder. On 5th July, 1894, began the Muslim year 1312.

    The Gregorian calendar was introduced into Egypt in 1875, but is government in the financedepartment only.

[^12]:    $\dagger$ M. is the initial letter of Mariette, L. of Lepsins, B. of Brugsch, and W. of Wilkinson; comp. p. civ. - The most important names only in each dyuasty are given; the complete lists are to be found in Baedeker's U'pper Egypt.

[^13]:    + Heracleopolis, or City of Hercules. The Phonician god Melkart was called by the Greeks Heracles, as he is said to have performed similar prodigies of strength. Brugsch identifies the Heracleopolitan with the Sethroitic nome (the capital of which was Pithom or Pi-Tura); see p. 194.

[^14]:    $\dagger$ In the tomb of the governor Khnum-hotep, at Beni Hasan, Absha, a Semitic chief, with his family and attendants, is represented approaching with gifts. The occasion was perhaps similar to that on which Abraham and Sarah were induced to visit Egypt (Gen. xii. 10). The record of their sojonrn there forms the earliest notice of Egypt to be found in the Bible.
    $\dagger \dagger$ From this it appears that, when Joseph came to Egypt at the end of the Hyksos period, he found on the throne a monarch of a race kindred to his $O W \mathrm{n}$, though conforming in all respects to the ancient customs of the Pharaohs. A famine mentioned in a tomb at El-Kâb is sometimes rather daringly identified with the one which brought Jacob and his family to Egypt (comp. Baedeker's Opper Egypt).

[^15]:    + The course of Sothis, or the dog-star, afforded the Egyptians a means of ascertaining the true astronomical year. They began their first year with the early rising of this star, at the beginning of the inundation (on 1st Thoth). The Egyptian solar year, being six hours too short, differed from the Sothis year by a qnarter of a day. This discrepancy soon became very perceptible. After 40 years the end of the solar year fell by 10 days, and after 400 years by 100 days, short of the end of the true Sothis year, and festivals recurred at seasons to which they did not properly belong. At length, after $365 \times 4$ years, the error corrected itself, and the beginning of the new year again coincided with the rise of Sothis. Thus in a period of 1460 fixed, or 1461 variable, years the error in the Egyptian calendar was rectified.

[^16]:    $\dagger$ The Mameluees were slaves (as the word mamlak imports), pnrchased by the sultans and trained as soldiers, for the purpose of forming their body-guard and the nncleus of their army. They placed Melik eşSîleh on the throne, hoping to govern him withont difficnlty. But when the new sultan fonnd his anthority snfficiently well established, he dismissed them from his service, and formed a new body-gnard of the Bahrite Mamelukes (who were so called from the fact that their barracks were sitnated in the island of Rôda in the Nile or Bah ${ }^{\circ}$ ). Ere long, however, the new gnards succeeded in gaining possession of almost the whole of the snpreme power.

[^17]:    + The Tnrkish Khalifs, however, have never been recognised by the Shir'ites, as not being descended from 'Ali. Most of the Snnnites also, especially among the learned Arabs, regard them merely as temporal monarchs. Relying on an ancient tradition, they maintain that none bnt descendants of the Koreishites, the family to which Mohammed belonged, can attain the office of Imâm, or spiritnal snperior. They accordingly regard the great Sherif of Mecca as their true Imâm.

[^18]:    † Esoteric (from غ̇owrepixós, inner, hidden) is a term applied to a mysterious doctrine, known to the initiated only, the antithesis of which is the exoteric doctrine (from $\dot{\dot{E}} \xi_{\omega \tau \text { poxós, external, popular). }}$

[^19]:    $\dagger$ In the more frequented mosques the custodians provide slippers for the use of Frank visitors. Fee 1 piastre.

[^20]:    $\dagger$ It is from this word mesgid (which means a place for prostration), that we derive the word mosque, through the Spanish mezquita and the French mosquée.

[^21]:    $\dagger$ The words merg and ghaba (forest) are almost unknown in Egypt, where neither meadows nor woods exist.

[^22]:    + A venerable old man is said to have appeared to the king in a dream and to have repeated to him the following lines from Homer (Od. iv. 54, 55) :
    'One of the islands lies in the far-foaming waves of the sea, Opposite Egypt's river, and its name is Pharos'.
    The following incident was also regarded as a favourable omen. As Deinocrates, the king's architect, was marking out the plan of the town and the sites of the principal buildings, the white earth used for the purpose ran short, and he supplied its place with the flour belonging to his workmen. The flour soon attracted numerous birds, by which it was speedily devoured, whereupon Aristander pronounced this incident to be a prognostication of the future wealth and commercial prosperity of the city.

[^23]:    + Bazar is properly speaking a Persian word, the Arabic equivalent for which is sak. The magazines of the wholesale merchants, with their Iarge courts, are called wakkaleh, which the Franks have corrapted to Occaleh, Occal, or Okella (pp. 71, 72).

[^24]:    $\dagger$ Kutb properly means pole or axis. This greatest of the Mohammedan saints is so named because the other weli's, who are divided into three classes (nakîb, pl. nukaba; negîb, pl. nugaba; bedîl, pl. abdâl), are considered, as it were, to revolve round him. According to the generally received belief of the Muslims the favourite abode of this saint is on the roof of the Ka'ba, but the Egyptians regard the Bâb ez-Zuwêleh as at least his next most favoured dwelling-place, and therefore sometimes call it the gate of El-Mutawelli, i.e. 'of the reigning kutb'. The tomb of Seyyid Ahmed el-Bedawi (p. 24) is another resort of the kutb, who of course can instantaneously transport himself from Mecca to Cairo or elsewhere at pleasure.

[^25]:    t The visitors to the tombs, burial-mosques, and welis, which are to be found near almost every village, generally have a twofold object in view, one being to do honour to the memory of the deceased and to invoke the blessing of heaven apon them, and the other to obtain through their mediation the fulfilment of some special wish. On arriving at the tomb, the visitor must tnrn towards the face of the deceased and pronounce the greeting of peace. He then walks round the maksara, or monument, from left to right, repeating the fatha at the door, or at each of the four sides, in a very low voice. A sûreh of the Korân is sometimes also repeated, and even the khatmeh, or recitation of the whole volume, is not unfrequently performed. In conclusion the praises of God and the prophet are usually recited, coupled with a prayer that the merit of the whole performance may be placed to the credit of the weli's soul. Before the concluding prayer, the worshipper sometimes introduces a prayer for his own temporal and spiritual welfare. When wealthy persons visit the tomb of a saint, they distribute bread among the poor, and pay one sakka or more to dispense water grataitously. Some of the tombs are chiefly visited on certain days of the week; and there are certain days of the year (especially about the middle of the month of Sha'bân) on which festivals are celebrated in honour of the patron saints of the different towns and villages. The most important of these are that of Seyyid Ahmed el-Bedawi at Tanta in Lower Egypt, and that of cabd er-Rahịm at Keneh in Upper Egypt. A week or a fortnight before the day of the festival, booths for the sale of coffee and sweatmeats begin to spring up around the shrine, and crowds of devotees flock to the tomb from all directions, some of them to perform the zikr, and others to take part in various fantasîyas. Dancing women, singers, masicians, jugglers, snake-charmers, buffoons, as well as swings and merry-go-rounds, present their various attractions to young and old. On the feast-day itself, when the crowd is greatest, a solemn procession takes place. The mahmal, a kind of wooden frame which usually lies on the roof of the tomb, is covered with the gold and silver-embroidered winding-sheet of the saint and placed on the back of a camel, gorgeously decorated with ribbons, carpets, and bells. The procession is headed by outriders galopping to and fro on camels, by fife-players and drummers, and by the armbearing population of the village, whose chief delight consists in firing off their guns. Immediately before the camel with the mahmal walk a number of venerable old men reciting passages from the Korân, and on each side of it are flag-bearers. Behind it come a band of music, female dancers, men on camels thamping on huge drums, and lastly a promiscuous crowd of holiday makers. The procession often marches about the town for an hour or more, and thence out into the desert. Towards evening the maḅmal is brought back to its usual place, and the festival then terminates.

[^26]:    t Coptic Worship. On entering the church, the members of the congregation first pay their homage to a number of pictures of saints hanging

[^27]:    he found in most Coptic churches, the water having been first blessed by the priest. Or, partly hy way of amusement, they perform the same ceremony in the Nile, into which they first pour some consecrated water. On these occasions the river in Coptic districts swarms with boats. On the eve of this festival, as well as on Holy Thursday and on the festival of the Apostles, the priest washes the feet of the whole of his congregation.

    It is impossihle to resist the impression that the Coptic worship has degenerated into a series of mere empty outward ceremonies, and indeed the more enlightened members of the sect admit this to be the case. Another external form to which they attach great weight is the observance of fasts, and a Copt who is negligent in this respect will rarely be met with. On these occasions all kinds of animal food, not excepting fat, eggs, butter, and cheese, are prohihited, and the usual fare consists of hread, onions, fül (heans), prepared with walnut or mustard-oil, and dukka (a kind of salad). - Comp. Butler's 'Coptic Cburches of Egypt' (1884).

[^28]:    $\dagger$ The legend is told by Moritz Busch as follows: - 'When 'Amr was bnilding this mosque, he asked his master, Khalif 'Omar, for a colnmn from Mecca. The Khalîf thereupon addressed himself to one of the columns there, and commanded it to migrate to the Nile, hut the column would not stir. He repeated his command more nrgently, but still the column remained immovable. A third time he repeated his command, angrily striking the column with his 'kurhatsh', but still without effect. At length he shouted, 'I command thee in the name of God, 0 column, arise, and betake thyself to Cairo!' Thereupon the column went, bearing the mark of the whip, which is still visihle'.

[^29]:    + Beyond the boundaries of Egypt, to the S., there also occur the Ethiopian pyramids in the island of Meroë near Begerawiyeh, at Nuri, aud on the Gebel Barkal; but these Ethiopian structures, as Lepsius has shown, are comparatively recent imitations of the Egyptian, those at Nûri and on the Gebel Barkal dating from the 7th ceut. B.C. at the earliest, and those of Begerawiyeh from the 1st century.

[^30]:    $\dagger$ According to Pliny, the Pyramids have been described by Herodotus, Euhemerus, Duris Samius, Aristagoras, Dionysius, Artemidorus, Alexander Polyhistor, Butorides, Antisthenes, Demetrius, Demoteles, and Apion, to whom we might add Strabo, Diodorus, Pomponius Mela, and others. They are mentioned by Aristotle.
    $t+$ This route is still traceable. It terminated on the E. side of the Pyramid of Cheops (see Plan).
    $t t t$ It is not quite clear whether Herodotus means that the 100,000 men were occupied 20 or 30 years in building the Pyramid of Cheops, as he does not say whether it was the building above the subterranean chambers, or the whole of the structure, that took twenty years.

[^31]:    + If inscriptions, now destroyed, really once existed on the outside of the pyramid, they doubtless contained much more important information than that which the interpreter professed to read. It is, moreover, unlikely that the interpreters; who attended travellers like the dragomans of the present day, were able to read hieroglyphics. They probably repeated mere popular traditions regarding the pyramids and other monuments, with embellishments and exaggerations of their own.
    $\dagger \dagger$ Obviously a reminiscence of the Hyksos (p. cvii), to whom, even at a later period, every national misfortune was popularly attributed.

[^32]:    †These 360,000 workmen (a number perhaps based on the 360 days of which the old Egyptian year consisted), like the 100,000 men of Herodotus, who were relieved every three months, are doubtless a mere myth.

[^33]:    The first modern traveller who carefnlly and successfully examined the Pyramids was Nicholas Shaw in 1721; but he still entertained the notion that the Sphinx had a subterranean connection with the Great Pyramid. He was followed by Norden in 1737; Pococke in 1743, who gives a plan and dimensions; Fourmont in 1755; Karsten Niebuhr in 1761; Davison in 1763, a most meritorious cxplorer, who discovered many new facts concerning the interior of the Great Pyramid; Bruce in 1768; Volney in 1783; Browne in 1792-98; Denon, Coutelle, Jumard, and other savants of the French expedition under Bonaparte in 1799-1801. Jumard in particular has the merit of having taken very accurate measurements, but he exhibited more ingenuity than good sense in attributing to the proportions of the building a hidden significance which they cannot be proved to possess. Hamilton, in 1801, was a dispassionate and critical observer. In 1817, Caviglia, a bold, but illiterate and fanciful seaman, was fortunate in eliciting new facts regarding the interior of the Great Pyramid, and excavated the Sphinx. In 1817, Belzoni ( p . 149), an intelligent investigator and discoverer, thoroughly explored the interior of the Second Pyramid. The next eminent explorer was Sir Gardner Wilkinson in 1831. In 1837 and 1838 Col. Howard Vyse and Mr. Perring made very thorough investigations and took careful measurements which will always be considered authoritative. In 1842-45 Prof. Lepsins, the distinguished Gcrman Egyptologist, who was president of the Prussian expedition, made several very important discoveries, and furnished us with much valuable information. He found no fewer than thirty pyramids which had been quite

[^34]:    + All the pyramids are entered from their N. sides. The stone sarcophagi containing the bodies lay from $N$. to $S$.

[^35]:    + The traveller will meet with the name of Giambattista Belzoni so frequently, and in connection with discoveries of such importance, that a brief notice of his remarkable career may not he unacceptahle. He was the son of a poor barber, and was born at Padua in 1778. He was brought up as a monk at Rome, where he was distinguished both for mental and physical endowments, aud devoted much of his time to drawing. When Rome was occupied by the French, he quitted that city and went to England, and while in London eked out his livelihood by acting as a model for figures of Hercules and Apollo. At the same time he devoted considerable time to study, and especially to the science of hydraulic engineering. Accompanied by his high-spirited wife, he next went to Egypt, where he arrived in 1815 and was at first obliged to support himself by dancing in public. He at length attracted the attention of Mohammed 'Ali, who accorded him relief. His first ondertaking of importance was the opening of the Pyramid of Chephren. He next discovered the tomb of Seti I. at Thebes (No. 17), the finest of all the royal tombs; he opened the rock-temples of Abû Simbel, and re-discovered the emerald mines of Zabara and the ruins of the ancient Berenike on the Red Sea. He died in 1823 while on a journey into the interior of Africa. A giant in stature, he inspired the Arabs with such admiration that he could prevail upon them to undertake the most unasual tasks. At the same time he was an intelligent explorer, and a very able and accurate draughtsman. His works, partly published by himself, and partly hy his widow, are still valuahle.

[^36]:    $\dagger$ 'I he Egyptian Sphinx (p. clxxiii), being of the masculine gender, is represented with the head of a ram or of a man, and never with that of a woman, which is ascribed to it in the Greek myths. Comp. p. clxxiii.

[^37]:    $\dagger$ We annex woodcuts of some of the best of these scenes, which will serve to impress them on the traveller's memory. They are from photographs taken from impressions obtained by Dr. Reil (d. 1880), and are therefore almost facsimiles. With the exception of the large tablean of Ti engaged in hanting (p. 183), they are reduced to one-twelfth of the original size.

[^38]:    $\dagger$ The agnomen of Casius is derived by Brngsch from the Semitic Egyptian word $H a z i$ or Hazion, signifying the asylum, or land of the asylum, a name which applies admirably to a shrine situated on the extreme E. margin of the Egyptian frontier. He also identifies the Baalzephon of the Bible, which lay 'beside Pi-hahiroth' (Exod. xiv. 9), with this hill and the shrine of Zeas Casius. The word Baral Zephon occurs in a papyrus in the British Museum in the form Baali Zepana, and is the Semitic equivalent ('lord of the north') of the Egyptian Ammon. Pihahiroth again literally means the 'entrance to the reed and papyrns swamps', by which was doubtless meant the Sirbonic Lake, so that Pi-

[^39]:    hahiroth itself probably lay at the $W$. end of the lake, at the entrance to the neck of land when approached from Egypt (p. 240).

    + Gerrha (plur. of the Greek gerrhon, a wall, or fortified place) is identified by Brugsch with $A n b u$ (a word also signifying fortified place), which is mentioned as early as the 19th Dynasty. This place was called Shur ('wall') by the Hebrews (Gen. xvi. 7; xxy. 18; Exod. xy. 22; 1 Sam. xy. 7; xxvii. 8). The town lay a little to the S.W. of Pi-hahiroth, which is mentioned at p. 204.
    t Brugsch mentions that another route traversed the desert of Shur (to the S. of the Sirbonic Lake) to the Gulf of Suez, but was little frequented, being described by Pliny as 'asperum montibus et inops aquarum' (mountainous and destitute of water).

[^40]:    + Although it is not the object of the handhook to enter apon the province of Biblical criticism, the views of the principal explorers are briefly given in connection with the different places. As the great charm of a journey through the Peninsnla consists in its associations with the Biblical account of the Exodns of the Israelites, and the promulgation of the law (p. 239), the traveller should of course be provided with a copy of the Bible, or at least with the books of Exodus and Numbers,

[^41]:    $\dagger$ The following theory regarding the Exodus, which was started during last century by G. H. Richter, and maintained more recently by Schleiden, has again been adopted by Br'ugsch (comp., however, the remark at p. 230).

    According to the monuments, the Sethroitic nome was also called Suku or Succoth. This region was covered with marshes, lakes, and cauals, so that it was impossible to erect towns in the Interior of the district, and accordingly the Egyptian texts, as well as the classic authors, mention towns on its boundaries only. The three following are those oftenest mentioned. One named Khetam (i.e. fortress) of Succoth lay to the N., near Pelusium, and was intended to protect the N. frontier. A second, bearing the Semitic name of Segol, or Segor (i.e. key), of Succoth, and situated on the S.W. frontier of the district, was intended to protect the district of Tanis-Ramses against invasion. The third, known by the Semitic name of Migdol (i.e. tower), or by the Egyptian name of Samut (also signifying a tower), lay on the outskirts of the Arabian desert, on the E. frontier of the district of Succoth, the site being probably identical with that of the modern Tell es-Samat (see Map of the Suez Canal to the E. of Kantara). Bragsch identifies the Biblical Succoth with Segol in Succoth, and Migdol with the above-mentioned Migdol-Samut. The Biblical Etham, however, which is wanting to complete the list of the stations, is also capable of identification, for it can be no other than the Egyptian Khetam, which signifies fortress, the same word being preserved also in the Khetam of Succoth (see above).

[^42]:    struction. Diodorus also mentions an expedition undertaken by Artaxerxes, King of Persia, against Egypt, during which part of the Persian army was lost in the Sirbonic lake, with the dangers of which they were entirely unacquainted. T'be main route from Egypt to Syria traversed the narrow neck of land between the Sirbonic lake and the Mediterianean (see p. 204). The Jews, after their arrival at the lake, first encamped at Pi-Hahiroth (i.e. the 'mouth of the chasms covered with reeds'), and then followed the usual military route between the waters to the shrine of Ba'al Zephôn (see p. 204). They then tarned to the S. in consequence of the divine command, traversed the desert of Shar (see p. 205), and arrived in three days at Marah (i.e. bitter), or the three bitter lakes in the isthmus (see p. 210). They proceeded thence to Elim, which is doubtless identical with the Aa-lim or Tentlim (i.e. town of the fishes) mentioned by the monuments, a place situated near the Gulf of Suez. The Egyptians, however, in the course of the pursuit, as they werc traversing the narrow neck of land between the Sirbonic lake and the Mediterranean, were overtaken by a storm and inundation, lost their way, fell into the Sirbonic lake, and were drowned. The occurrence of such floods in this district is borne out by an observation of Strabo, that a great flood took place during his residence in tbis region near Mount Casius (see Note, p. 204), overflowing the country to such an extent, that Mount Casius appeared like an island, and that the road to Palestine near it was navigable for vessels. The sea mentioned in the Bible, through which the Israelites passed, would, according to this theory, not be the Red Sea but the Sirbonic lake.

[^43]:    +23 . 'And when they came to Marah, they could not drink of the waters of Marah, for they were bitter; therefore the name of it was called Marah (i.e. bitter). 24. And the people murmured against Moses, saying What shall we drink? 25 . And he cried unto the Lord, and the Lord shewed him a tree, which when he had cast into the waters, the waters were made sweet'.

[^44]:    $\dagger$ Exodus xii. 37. 'And the children of Israel journeyed from Rameses to Succoth about 600,000 men on foot that were men, beside children'.

[^45]:    The Jebel Hammám Far'ûn ( 1567 ft . above the sea-level), or the ' $B$ ath of Pharaoh', is most conveniently ascended from this point, and is chiefly interesting to geologists. Half-a-day at least is required for the excursion, and the traveller should be provided with refreshments. The mountain is in the form of a blunted pyramid, with a very extensive base; the limestone on its slopes is remarkably jagged and furrowed. At several places there are warm springs, which are still used by the Arabs, particularly as a cure for rheumatism. Before using the water they are in the habit of presenting a cake or other offering, to the spirit of Pharaoh, which still haunts the spot, in order to propitiate him. One tradition is, that Pharaoh still lies here in the hot water, where he is to be eternally boiled for his sins. Another legend is to the effect, that, when Pharaoh was drowned in the Red Sea, he saw Moses standing on a rock of the Jebel Hammâm Farrûn, and was so infuriated at the sight, that the water closing over him was spouted up to a great height by the violence of his panting. Ever since then his spirit has haunted this spot, and every ship that approaches the Jebel Hammâm Farûn is

